

Figure 1 – page 1

```
aagggtaggggagaaaaatttctatgtatgttagttttttatcttaaaaaattagctttt
1  -----+-----+-----+-----+-----+-----+ 60
ttcccatcccctcttttaagatacatacaatcaaaaaatagaatttttttaatcgaaaa

gtgaggctgggcgtggtggctcacgcctgtaatcccagcactttgggaggccgaggcggg
61  -----+-----+-----+-----+-----+-----+ 120
cactccgaccgcaccaccgagtgcggaacattagggctcgtgaaaccctccggctccgccc

cagatcacgaggtctggagattgagaccgtcctggctaacacagtgaacccccgtctcta
121 -----+-----+-----+-----+-----+-----+ 180
gtctagtgtccagacctctaactctggcaggaccgattgtgtcactttggggcagagat

ctaaaaatacaaaaaattagctgggcgtggtggcgggcgcctgtagtcccagctattcgg
181 -----+-----+-----+-----+-----+-----+ 240
gatttttatgttttttaatcgaccgcaccaccgcccgcggacatcagggtcgataagcc

gaggtgaggcagtagaatggcatgaacccgggaggcggagcttgacgtgagctgagatcc
241 -----+-----+-----+-----+-----+-----+ 300
ctccactcgtcatcttaccgtacttgggcccctccgcctcgaacgtcactcgactctagg

tgccactgcactccagcctgggtgacagagcgagactctgtctcaaaaaataaaaaagc
301 -----+-----+-----+-----+-----+-----+ 360
acgggtgacgtgaggtcggacccactgtctcgctctgagacagagtttttttattttttcg

ttttgccaatatttaaaatatgacttgatgtgagagtcttaatttcttctacgcagtata
361 -----+-----+-----+-----+-----+-----+ 420
aaaacggttataaattttataactgaactacactctcagaattaaagaagatgcgtcatat

cagatatatagcattcctgtcatttagcaggggtgatagtaaaacaaaaaacaacaaac
421 -----+-----+-----+-----+-----+-----+ 480
gtctatatatcgtaaggacagtaaatcgtccccactatcattttgtttttttgttttttg

cccacaaaacctgtggtgaggcactgaccaatcagaatgattgatggtcacagtctggtc
481 -----+-----+-----+-----+-----+-----+ 540
gggtgttttgacaccactcgtgactggtagtcttactaactaccagtgtcagaccag

caaaattagccccacaccagacaccatggaggaaaagtgagagtaactcaatttaagtt
541 -----+-----+-----+-----+-----+-----+ 600
gttttaatcgggggtgtggtctgtggtacctctcttttactctcattgagttaaattcaa

gacagtgggtttgttttattgcagtttatctgtgtgtgaataggtagatttaaggattgtt
601 -----+-----+-----+-----+-----+-----+ 660
ctgtcaccaaacaataaacgtcaaatagacacacacttatccatctaaattcctaacaa

ggccaggtgtggtggctcacacctggaatcccagcacttttaggaggcagaggcaggcgg
661 -----+-----+-----+-----+-----+-----+ 720
ccggtccacaccaccgagtggtgaccttagggctcgtgaaaatcctccgtctccgtccgcc

atcacttgagatcaggagttcgagacagcctggccaacatgggtgaaaccctgtctctact
721 -----+-----+-----+-----+-----+-----+ 780
tagtgaactctagtcctcaagctctgtcggaccgggtgtaccactttgggacagagatga
```

Figure 1 – page 2

```
aaaaatacaaattagccaggcatggttagtgcatgcctgtaattccagctacttgggaggc
781 -----+-----+-----+-----+-----+-----+-----+ 840
tttttatgtttaatcgggtccgtaccatcacgtacggacattaaggtcgatgaaccctccg

tgaggcaggagaatcgcttgaaccggggaggcagaggttgacgtgagccgagattgcgcc
841 -----+-----+-----+-----+-----+-----+-----+ 900
actccgtcctcttagcgaacttgccctccgtctccaacgtcactcggctctaacgcgg

attgcgctccagcttgggcaacaagagcgaactctgtctcaaaaaaaaaaaaaaaaaaa
901 -----+-----+-----+-----+-----+-----+-----+ 960
taacgcgagggtcgaaccggtgttctcgctttgagacagagtttttttttttttttttt

aaggattgtcaaattgattcttgaagtaaaccataaattaaagataacaaaacaagcaca
961 -----+-----+-----+-----+-----+-----+-----+ 1020
ttcctaacagtttactaagaacattcatttggtatttaatttctattgtttgttcgtgt

agagaaaaatgatacagcccttctccttgacctctcactaatctgcccttttaagataaag
1021 -----+-----+-----+-----+-----+-----+-----+ 1080
tctctttttactatgtcgggaaaggaactggagagtgattagacgggaaaattctatttc

atatcattttaactatgagaaggtaactgcttttctaaaggagctcattttatgaagata
1081 -----+-----+-----+-----+-----+-----+-----+ 1140
tatagtaaaattgatactcttccattgacgaaaagatttcctcgagtaaaatacttctat

atattttgaaaactaatatttaggagtggtttcaccattctatgattgcccaaaaactaa
1141 -----+-----+-----+-----+-----+-----+-----+ 1200
tataaaacttttgattataaatcctcacaaaagtggtaagataactaacgggtttttgatt

gtgatacttataaaaaacactaagtttttatacatatactagttggaaatattccaagctgt
1201 -----+-----+-----+-----+-----+-----+-----+ 1260
cactatgaatatttttgtgattcaaaatatgtatatgatcaacctttataagggttcgaca

agaaatattccaacaaggattatttccatgggggttaatttggttaaaaatataaaagacac
1261 -----+-----+-----+-----+-----+-----+-----+ 1320
tctttataagggttggttcctaataaaggtaccccaattaacaatttttatattttctgtg

cacctttctattaatttgtaacaactaattgacatcagagaagatgaaaatttactagct
1321 -----+-----+-----+-----+-----+-----+-----+ 1380
gtggaaagataattaacattgttgattaactgtagtctcttctacttttaaatgatcga

ggatatcaaccagattttttgtattattggcaactgagattgaaaaatgaatgaaagagtc
1381 -----+-----+-----+-----+-----+-----+-----+ 1440
cctatagttgggtctaaaaacataataaccgttgactctaactttttacttactttctcag

tacttcatccatttagatatcctttcacttgatctccctgtttccttactgtcctaagt
1441 -----+-----+-----+-----+-----+-----+-----+ 1500
atgaagtaggtaaatctataggaaagtgaacctagagggacaaaggaatgacaggattac

aatagaaatgatcggttacaagctgggcatgggtggcttgacactgtagtcccagctactgg
1501 -----+-----+-----+-----+-----+-----+-----+ 1560
ttatctttactagcaatgttcgaccctaccaccgaacgtggacatcagggtcgatgacc
```

Figure 1 – page 3

ggaggctgaggagggaggatggcttgaggccagagttgaaggatccagagatgattgcgc  
1561 -----+-----+-----+-----+-----+-----+ 1620  
cctccgactcctccctcctaccgaactccggtctcaacttcctaggtctctactaacgcg  
agtgacgctaagcttggggccacagagttgagaccctgtctctaaaaattttttttaatt  
1621 -----+-----+-----+-----+-----+ 1680  
tcactgcgattcgaaccggtgtctcaactctgggacagagatttttaaaaaaaattaa  
taaattataaaaagagaaatgcttggttacaaccacaaaagggaacaagatatcacatat  
1681 -----+-----+-----+-----+-----+ 1740  
atttaatatTTTTCTCTTACGAACAATGTTGGTGTTCCCTTTGTTCTATATGTGTATA  
aattgtggaagtaaaaaataaataatttaaaaaatacttttgggtgctcgcttcggcagcac  
1741 -----+-----+-----+-----+-----+ 1800  
ttaacaccttcattttttattttattaaatttttatgaaaaccacgagcgaagccgtcgtg  
atatagttggaatgatagagaagatttgcatggccctgcgcaagatgacatacaaattc  
1801 -----+-----+-----+-----+-----+ 1860  
tatatcaaccttactatctcttctaaacgtaccggggacgcggttctactgtatgtttaag  
gtgaagtgttccatatttaaaaaaacaaaaatacttttgggcctggcactgtggctcat  
1861 -----+-----+-----+-----+-----+ 1920  
cacttcacaaggtataaatttttttgttttttatgaaaaccgacggtgacaccgagta  
gcctgtaatccaaacactttgggaggctgaggcgggaggattgcttgaaccaggagttg  
1921 -----+-----+-----+-----+-----+ 1980  
cggacattaggtttgtgaaaccctccgactccgcccgcctaacgaacttgggtcctcaac  
gagaccagcctggacaacatgggtgaaatcccgtctctataaaaaaatataaaaaattaacc  
1981 -----+-----+-----+-----+-----+ 2040  
ctctgggtcggacctgttgtaccactttagggcagagatatTTTTTTTatgtttttaattgg  
aggtgtgggtggtgcacgcctgtaatccaaggtacttgggaggctgaggcgggaggatcgc  
2041 -----+-----+-----+-----+-----+ 2100  
tccacaccaccacgtgcggacattaggttccatgaaccctccgactccgcctcctagcg  
ttgagccaggaggttgggcctgggtaacagagaccgtctcaaaaaatttaaaaaattaaa  
2101 -----+-----+-----+-----+-----+ 2160  
aactcgggtcctccaaccggaaccattgtctctggcagagtttttttaatttttaattt  
aaaaaaactttctgcaagatgaagtgacaatacctggaaaatacatgtgacttgaccaa  
2161 -----+-----+-----+-----+-----+ 2220  
tttttttgaaagacgttctacttctactgttatggaccttttatgtactgaactggttt  
(-676)  
aattactataggtgaaaataaatttagcaaagttgctttcctaatacaaccctaaatag  
2221 -----+-----+-----+-----+-----+ 2280  
ttaatgatatccactttttatttaaatcgtttcaacgaaaggatttatgttgggttttatc  
actgggaacagctacatactgttaatggttccctctatgtgacattctagaaaaggcaga  
2281 -----+-----+-----+-----+-----+ 2340  
tgacccttgctcgatgtatgacaattaccaaggagatacactgtaagatcttttccgtct

Figure 1 – page 4

actatagggagggaaaacatctgtggttgcccaggagctaggggtgggaagaggggaattt  
 2341 -----+-----+-----+-----+-----+-----+-----+ 2400  
 tgatatccctccctttttagacaccaacgggtcctcgatccccacccttctcccttaa  
 (-542)  
 actacaaagagcagcaagaaacttgtgggcccagagctattttgggtctccgttttgggtga  
 2401 -----+-----+-----+-----+-----+-----+-----+ 2460  
 tgatgtttctccgtgcttctttgaacaccgggtctcgataaaaccagaggcaaaaccact  
 (-477)  
 tgtatatacgttttgccagagttcacagaactgcacactgaagaaagatggatttcacgga  
 2461 -----+-----+-----+-----+-----+-----+-----+ 2520  
 acatatatgcaaacgggtctcaagtgtcttgacgtgtgacttctttctacctaagtgct  
 (-420)  
 atgtgaattatatctcaacaaacttgacttcaaaaaacagatcgagaaaagatgattcta  
 2521 -----+-----+-----+-----+-----+-----+-----+ 2580  
 tacacttaatatagagttgtttgaactgaagtttttgtctagctcttttctactaagat  
 (-339)  
 ttcccaaaaagggggaggggggaagatcattatataggtgagtggtcatttaaatacagag  
 2581 -----+-----+-----+-----+-----+-----+-----+ 2640  
 aagggtttttcccccctcccccttctagtaatatccactcacaagtaaatttagtctc  
  
 tacgagatttatccgtgaaaatcgacgtggagcgaacaagggggatgctgataccgacct  
 2641 -----+-----+-----+-----+-----+-----+-----+ 2700  
 atgctctaaataggcacttttagcgtcacctcgcttgttccccctacgactatggctgga  
  
 cctggttgaaaagcctgtagagcagcgcggtgacagtggaaacagcgggtcaggcgggtgg  
 2701 -----+-----+-----+-----+-----+-----+-----+ 2760  
 ggaccaacctttcgacatctcgtcgcgcctactgtcacctgtcgccagtcgccacc  
  
 gcgcctgagcgaggggctagagcgggatgggcgggaggcaagcctgccagcctgggag  
 2761 -----+-----+-----+-----+-----+-----+-----+ 2820  
 cgcgactcgtccccgatctcgccctaccgccccgcctcggttcggacgggtcggaccgc  
 (-116) (-114)  
 gggcctcggcacaggagctggtcggggagccccgcgtcctgagtcgcaggccgaggaga  
 2821 -----+-----+-----+-----+-----+-----+-----+ 2880  
 cccggagccgtgtcctcgaccgacgcctcggggcggcaggactcagcgtccggctcctct  
  
 cagtgagtgcgcgccctgagtcgcaggccgaggagacagtgagtgcgcgccctgagtcgc  
 2881 -----+-----+-----+-----+-----+-----+-----+ 2940  
 gtcactcacgcgcgggactcagcgtccggctcctctgtcactcacgcgcgggactcagcg  
  
 aggcggaggagacagtgagtgcgcgccctgggcgccccgccccagccccagccccctcc  
 2941 -----+-----+-----+-----+-----+-----+-----+ 3000  
 tccggctcctctgtcactcacgcgcgggacccgcggggcgggggtcgggggtcggggaagg  
  
 ctgggcccccgcaaggcgggaacgcgagcgccctccccgagctgtgtctcgagaccttg  
 3001 -----+-----+-----+-----+-----+-----+-----+ 3060  
 gacccgggggcttccgccccttgcgctcgcggagggggctcgacacagagctctggaaac  
  
 tctccccctcacccctcgccccgtgcctgcctttactggccccctccctcatgccccgt  
 3061 -----+-----+-----+-----+-----+-----+-----+ 3120  
 aggaggggagtgaggagccgggcgacggacgggaaatgaccgggggagggagtaggggca

**Exon 1**

Figure 1 – page 5

**Exon 2**

3121 ccctcagcaccctctcctttcaactaactttcccgctcccgacagtggtgcacttcgtg 3180  
-----+-----+-----+-----+-----+-----+  
gggagtcgtgggagaggaaagttgattgaaagggcgagggctgtcaccgacgtgaagcac

M A A L R D -

3181 acgctgagatacagaaggacgtgcaggtgagagctgtagggcctggaatggcccaagtgg 3240  
-----+-----+-----+-----+-----+-----+  
tgcgactctatgtcttcctgcacgtccactctcgacatcccggaccttaccgggttcacc

A E I Q K D V Q

3241 agcctaggctaataatggaagtctggcctggcccgacccctgtccccgggactcctggagtc 3300  
-----+-----+-----+-----+-----+-----+  
tcggatccgattaccttcagaccggaccgggctgggacagggggcctgaggacctcag

3301 ggggtagggcaggggtctaggcttcgacctttccaggaactgaggtcggccaagtggagg 3360  
-----+-----+-----+-----+-----+-----+  
ccccatcccgtcccagatccgaagctggaaaggtcccttgactccagccggttcacctcc

I2 (-75) I2 (-47) C-INSERTION

3361 tggaggtggtgacggagccctcgcgctgcagtcacagctcttctccctctctacctctca 3420  
-----+-----+-----+-----+-----+-----+  
acctccaccactgcctcgggagcgcgacgtcagtgctcgagaagaggagagatggggagt

I2 (-10)

**Exon 3**

3421 ctccactgtgggagctgggtcagacctactacgggcaggtgctgaagagatcggcagac 3480  
-----+-----+-----+-----+-----+-----+  
gaggtgacaccctgcgaccagctctggatgatgcccgctccacgacttctctagccgtctg

T Y Y G Q V L K R S A D -

3481 ctccagaccaacggctgtgtcaccacagccaggccggtccccaagcacatccgggaagcc 3540  
-----+-----+-----+-----+-----+-----+  
gaggtctggttgccgacacagtggtgtcggtccggccaggggttcgtgtaggcccttcgg

L Q T N G C V T T A R P V P K H I R E A -

3541 ttgcaaaatgtacacgaagaagtagccctaaggtagagtgcctgtgctgtccccaggaa 3600  
-----+-----+-----+-----+-----+-----+  
aacgttttacatgtgcttcttcacggttcacggttcacggttcacggttcacggttcacg

L Q N V H E E V A L R

3601 gaccccaaacagcagttttccaaaagataatgatgcaggtcactaggggaattaaccgct 3660  
-----+-----+-----+-----+-----+-----+  
ctgggggttgcgtcaaaagggttttctattactacgtccagtgatcccttaattgggca

3661 agccaccaaccatcagcttgcttgccttgccttgccttgccttgccttgccttgccttgc 3720  
-----+-----+-----+-----+-----+-----+  
tcgggtggttgggtagtcgaacggaacagataacatttttaggatttagagtcgtgggtag

Figure 1 – page 6

```

atcttactgctctaagaacctccgatgagctctggcgcgccagtgagcctgtagtcccaa
3721 -----+-----+-----+-----+-----+-----+ 3780
tagaatgacgagattcttggaggctactcagaccgcgcggtcactcggacatcagggtt

gtgcttgggaggctgaggcagaggatcgcgtagcccagaagttacaggctgtagtgtc
3781 -----+-----+-----+-----+-----+-----+ 3840
cacgaaccctccgactccgtctcctagcgcactcgggtcttcaatgtccgacatcacacg

gatccgggatgtgaatagccactgcactccagcttgggtcaacatagccagatgcatctct
3841 -----+-----+-----+-----+-----+-----+ 3900
ctaggccctacacttatcgggtgacgtgaggtcgaaccagttgtatcgggtctacgtagaga

aaaataaatgcgtagctttaaaaaattgcctaaaaaaaagaacctccagcgtgaacactc
3901 -----+-----+-----+-----+-----+-----+ 3960
ttttattttacgcatgaaatttttttaacggatttttttcttggagggtcgacttgtag

tgtagtccttaccatgctcacagaatacagtcacactcactggatctgccattcaagat
3961 -----+-----+-----+-----+-----+-----+ 4020
acatcagggatgggtacgagtgcttattgtcagtgtagtgacctagacggtaagttcta

atgcgcagttcagcaccactaatcaaccttggcccttttgacccttcccttcctcactc
4021 -----+-----+-----+-----+-----+-----+ 4080
tacgctcaagtctgggtgattagttggaaccgggaaaactgggaaggggaaggagttag

catcagcactgcctgccagccggcagtcaccaatttgaaggtcttcccttttcttttt
4081 -----+-----+-----+-----+-----+-----+ 4140
gtagtcgtgacggacgggtcggccgtcagtggttaaacccttcagaagggaaaagaaaaa

ccttcccaaccctgcgcattccagcaccacgtgctgtcccacactactgcatggagccttc
4141 -----+-----+-----+-----+-----+-----+ 4200
ggaaggggtgggacgcgtaggtcgtggtgcgacgacaggggtggatgacgtacctcggaag

tctaattccttgagcggcctcttcccaaaactgccacagcactctgtcactcgggtctgtcc
4201 -----+-----+-----+-----+-----+-----+ 4260
agattaggaactcgccggagaaggggtttgacgggtgtcgtgagacagttagccagacagg

gtaaatcacgggaagtgttttctgtgcacgatgttttatctcgccctctcaaatacaccta
4261 -----+-----+-----+-----+-----+-----+ 4320
catttagtgcccttcacaaaagacacgtgctacaaaatagagcggagagtttatgtggat

cgcgccgggggagcgggtggctcacgtccgtcatcccagaacttgggaggccaaggcaggta
4321 -----+-----+-----+-----+-----+-----+ 4380
gcgcgcgccctcgccaccgagtgcaggcagtaggggtcttgaaccctccggttccgtccat

gatcacttgagggtcagaagttcaagaccgacctgggtcaacatagtgaaccctgtctcta
4381 -----+-----+-----+-----+-----+-----+ 4440
ctagtgaactccagtccttcaagttctgggtggaccagttgtatcactttgggacagagat

ctgaaaatacaaaaattagctgggtgtagtggggcacgcctgtagtcccagctacttggg
4441 -----+-----+-----+-----+-----+-----+ 4500
gacttttatgtttttaatcgaccacatcaccccgctgcggacatcaggggtcgatgaacc

```

Figure 1 – page 7

```
aggctgagggaggagaatcacttgaacgtggaaggcggaggtcgagtgagcggagattg
4501 -----+-----+-----+-----+-----+-----+ 4560
tccgactccctcctcttagtgaacttgcaccttccgctccagcgtcactcgctcctaac

tgccactgcactccagcctgggcaacagagaaaaactcagtcaaaacaaaacaaaacaaa
4561 -----+-----+-----+-----+-----+-----+ 4620
acggtgacgtgaggtcggacccgttgtctctttttgagtcagttttgtttgtttgttt

aaaaaggccgggggtggtggcttatgtctgtaatcccagcactttgggaggccgaggcgg
4621 -----+-----+-----+-----+-----+-----+ 4680
tttttccggcccccaccaccgaatacagacattagggtcgtgaaaccctccggctccgcc

gaggatcacgaggccaggagatcgagaccatcctggctatcatggtgaaaccccgctctct
4681 -----+-----+-----+-----+-----+-----+ 4740
ctcctagtgtccggtcctctagctctggttaggaccgatagtagtaccactttggggcagaga

actaaaaatacaaaaaatattatccgggtgtggcggcacgcgcctgtagttccggctgctg
4741 -----+-----+-----+-----+-----+-----+ 4800
tgatttttatgtttttataataggcccacaccgccgtgcgcgagacatcaaggccgacgac

gggaggctgaggcaggagaacggcgtgaacccgggaggcggagcttgagtgagctgagt
4801 -----+-----+-----+-----+-----+-----+ 4860
ccctccgactccgtcctcttgccgcacttgggcctccgctcgaacgtcactcgactca

tcgagccactgcactccagcctgggtgacagggaagactccgtctcaaaaaaaaaaaaaa
4861 -----+-----+-----+-----+-----+-----+ 4920
agctcggtgacgtgaggtcggacccactgtcccgttctgaggcagagttttttttttttt

aaaaaaaaaaaaaaaaaaaaattagccaggagtggtggcaggcgctcgtagtcctagctact
4921 -----+-----+-----+-----+-----+-----+ 4980
tttttttttttttttttttaatcggtcctcaccacgtccgcgagcatcaggatcgatga

ggggaggctgaggtaggagaatggtgtcaacccgggaggcggagcttgcggtgagctgag
4981 -----+-----+-----+-----+-----+-----+ 5040
gccctccgactccatcctcttaccacagttgggccctccgcctcgaacgccactcgactc

atcgcgccactgcactccagcctgggcgacagagcgagactccgtctcaacaaaaacaaa
5041 -----+-----+-----+-----+-----+-----+ 5100
tagcgcggtgacgtgaggtcggacccgctgtctcgctctgaggcagagtttgttttgttt

acaaaacaaaacaaaacaaatcaaaacaaaaaacgcctatgggacagaaaccttacattt
5101 -----+-----+-----+-----+-----+-----+ 5160
tgttttgtttgtttgttttagttttgttttttgcggataccctgtctttggaatgtaaa

tttctcaataactagcgcagtcctgggcctgaattagaagctcagctaataatgattaaatg
5161 -----+-----+-----+-----+-----+-----+ 5220
aaaggagttattgatcgcgtcaggacccggacttaatcttcgagtcgattactaatttac

tatttattcaacacattattttattttattttattttttgagacggagtcctcactctg
5221 -----+-----+-----+-----+-----+-----+ 5280
ataaataagttgtgtaataaaaataaaaataaaaataaaaactctgcctcagagttagac
```

Figure 1 – page 8

tcccttaggctggagtgagtgaggcgccatctctgctcactgcaacctctgcctcctgggt  
 5281 -----+-----+-----+-----+-----+-----+-----+ 5340  
 agggaatccgacctcacgtcacgcggtagagacgagtgacgttgagacggaggacca  
  
 tcaagccattctcctgcctcagcctcccgaggagctgggattacaggtacctgctaccgt  
 5341 -----+-----+-----+-----+-----+-----+-----+ 5400  
 agttcggtaagaggacggagtcggagggctcctcgaccctaattgtccatggacgatggca  
  
 gccagctgatttttttggtatttttagtagagacagggtttcactatggtggccaggctg  
 5401 -----+-----+-----+-----+-----+-----+-----+ 5460  
 cgggtcgactaaaaaaccataaaaaatcatctctgtcccaaagtatacaaccgggtccgac  
  
 gtctccaactccttgctcaagcgatccgcctgccttgacctcccaaagtgtgtgatta  
 5461 -----+-----+-----+-----+-----+-----+-----+ 5520  
 cagaggttgaggaacggagttcgctaggcggacggaactggaggggtttcacgacactaat  
  
 taggcgtgagccaccgcgccagcctgaacacattattttagatggcttatgaagtctta  
 5521 -----+-----+-----+-----+-----+-----+-----+ 5580  
 atccgcactcgggtggcgcggtcggaacttggtgaataaaatctaccgaatacttcagaat  
  
 gtgcctagcacatgcccacaataactgtggtaaagcagatacagtcaccagccttcatggg  
 5581 -----+-----+-----+-----+-----+-----+-----+ 5640  
 cacggatcgtgtacgggttggtatgacaccatttcgtctatgtcagggtcggaagtaccc  
  
 tgtccagttcagtgagactaaacatcagaagtatgagtgaatgatgcaagaaagaagga  
 5641 -----+-----+-----+-----+-----+-----+-----+ 5700  
 acaggtcaagtcacctctgatttgtagtcttcatactcacttactacgttctttcttct  
  
 aggaaggaaggaacggagggaggaggaggagggaagtatgtataagatttagtggttt  
 5701 -----+-----+-----+-----+-----+-----+-----+ 5760  
 tcttctcttcttgcctccctccctccctccctccctccctccatacatattctaaatcaccaa  
 I3 (-18)  
 catgtcttacagtcctccagggaaaaaataatgtgttttccatttccagatattatggctg  
 5761 -----+-----+-----+-----+-----+-----+-----+ 5820  
 gtacagaatgtcagaggtcccttttttatacacaaaaggtaaagggtctataataccgac  
  
 Y Y G C -  
  
 tggctcgggtgatccctgagcatctagaaaactgctggattttggatctgggtagtggag  
 5821 -----+-----+-----+-----+-----+-----+-----+ 5880  
 accagaccactagggactcgtagatcttttgacgacctaaaacctagaccatcaccttc  
  
 G L V I P E H L E N C W I L D L G S G S -  
  
 tggcagagattgctatgtacttagccagctgggtgggtgaaaaggacacgtgactggaat  
 5881 -----+-----+-----+-----+-----+-----+-----+ 5940  
 accgtctctaacgatacatgaatcgggtcgaccaaccacttttctgtgcactgacctta  
  
 G R D C Y V L S Q L V G E K G H V T G I -

Exon 4



Figure 1 – page 9

5941 agacatgaccaaggccaggtgaggcatgatttgaagacaaggagaaaaagattctcaa 6000  
-----+-----+-----+-----+-----+  
tctgtactggtttccggtccactccgtactaaaccttctgttctcttttttctaagagtt  
  
D M T K G Q  
  
6001 aagcattatttgaaaaataaagttgttttcttcgtggctcttcaaggataatttaagaaa 6060  
-----+-----+-----+-----+-----+  
ttcgtataaaacttttttatttcaacaaaagaagcaccgagaagttcctattaaattcttt  
  
6061 gcttctagtttagcaatgctcatttgtgccactagtgcttctgtcttggaaactgataac 6120  
-----+-----+-----+-----+-----+  
cgaagatcaatcgttacgagtaaacacgggtgatcacgaaggacagaacctttgactattg  
I4 (217)  
6121 ttgaacaattaggggttcttctgggcgaacacaagagtcggaggttgctctgatgatgaa 6180  
-----+-----+-----+-----+-----+  
aacttggttaatccccaagaagaccgcgttggtgtctcagcctccaaacgagactatactt  
  
6181 tatcgtagcatagagtggaactttgatctttcccttcttgctgccatctatcctgaaaga 6240  
-----+-----+-----+-----+-----+  
atagcactgctatctcacctgaaactagaaaggaagaacgcggtagataggactttct  
  
6241 ttttgttattgaatgaggagtttattcaagccaaactgcacgggcagcagggtttatg 6300  
-----+-----+-----+-----+-----+  
aaaacaataacttactcctcaataagttcggttgacgtgccgcgtcctcctcaatac  
I4 (365)  
6301 tcccaggttgtagtatatcctacgtgtccacaggaatcttgtagttttatccaaaataat 6360  
-----+-----+-----+-----+-----+  
agggtccaacatcatataggatgcacaggtgtccttagaacatacaaatagggtttatta  
I4 (414)  
6361 ctaggggaagtattctgttagtgataggaaattttttaggaaaaagttgtgtatttttt 6420  
-----+-----+-----+-----+-----+  
gatcccccttcatataagacaatcactatccttttaaaatcctttttcaacacataaaaaa  
I4 (467)  
6421 tcaaaatggttatcaaaactatatttttcttactttaggtggaagtggctgaaaagtatct Exon 5 6480  
-----+-----+-----+-----+-----+  
agttttacaatagttttgatataaaaagaatgaaatccaccttcaccgacttttcataga  
  
V E V A E K Y L -  
  
6481 tgactatcacatggaaaaatatggcttccaggcatctaatgtgactttttattcatggcta 6540  
-----+-----+-----+-----+-----+  
actgatagtgtacctttttataccgaaggtccgtagattacactgaaaataagtaccgat  
  
D Y H M E K Y G F Q A S N V T F I H G Y -  
  
6541 cattgagaagttgggagaggctggaatcaagaatgagagccatgatattgttgttaggt 6600  
-----+-----+-----+-----+-----+  
gtaactcttcaaccctctccgaccttagttcttactctcggtactataacaacacatcca  
  
I E K L G E A G I K N E S H D I V V

Figure 1 – page 10

```
ctatattcttactgttatgactatagcccattttctttattattattattattattg
6601 -----+-----+-----+-----+-----+-----+ 6660
gatataagaatgacaatactgatatcggttaaagaaataataataataataataac

agatggactctcgctctgtcaccaggccagagtgcagtggcccaatgtcagctcacgat
6661 -----+-----+-----+-----+-----+-----+ 6720
tctacctgagagcgagacagtggggtccggtctcacgtcacgggttacagtcgagtgcta

aacctctgcctcccgggttcaactgattctcttgcctcagcctctcaagtagctgggatt
6721 -----+-----+-----+-----+-----+-----+ 6780
ttggagacgggagggcccaagttgactaagagaacggagtcggagagttcatcgaccctaa

ataggcacacgctaccacatccagctaattttttaaatcttcttttagtagagacaggggt
6781 -----+-----+-----+-----+-----+-----+ 6840
tatccgtgtgcatgggtgtaggtcgattaaaaaatttagaagaaaatcatctctgtccca

ttcaccatgttggccaggtggtctcaaactcctgatctcaggtgatccaccgcttcca
6841 -----+-----+-----+-----+-----+-----+ 6900
aagtgggtacaaccggtccgaccagagtttgaggactagagtcactaggtgggcgaaggt

cctcccaaagtgtctgggattacaggtgtgaggcactgtgctcagccctcatttccttttg
6901 -----+-----+-----+-----+-----+-----+ 6960
ggaggggtttcacgaccctaattgtccacactccgtgacacgagtcgggagtaaaggaaaac

aacacagagatgtcactattactgtttgtgaattgactctcatttaggggtgttaaacta
6961 -----+-----+-----+-----+-----+-----+ 7020
ttgtgtctctacagtgataatgacaaacgacttaactgagagtaaataccacaatttgat

aacttagcatggcttactaatgggagagagctgggttgagctgctggagctcaccagcag
7021 -----+-----+-----+-----+-----+-----+ 7080
ttgaatcgtaccgaatgattaccctctctcgaccaaactcgacgacctcgagtggctcgtc

cagaacacaccagaccaagaggggaacttacttgaaacttaaccacaaaccaatgaaccca
7081 -----+-----+-----+-----+-----+-----+ 7140
gtcttgtgtgggtctgggttctcccttgaaatgaactttgaattgggtgttggttacttgggt

aaagaccagcaggaccactaagtttgcctacaatacatgctgacctgtatctttcata
7141 -----+-----+-----+-----+-----+-----+ 7200
tttctgggtcgtcctgggtgattcaaacgaggatgttatgtacgactggacatagaaagtat

atattttcatggtaaattataggattctattttcctttttccctcaagttgttattgtca
7201 -----+-----+-----+-----+-----+-----+ 7260
tataaaagtaccattttaatatcctaagataaaggaaaaaggagttcaacaataacagt

aatcatgcccaagtgcagctgcctttgaggaacatagcctgtttacgtgaagcataaga
7261 -----+-----+-----+-----+-----+-----+ 7320
ttagtacgggttactgtgcagcgaaactccttgatcgacaaatgcacttcgtattct

aatgccttgtgccggccaggtgcggtgggtcacgcctataatcccagcattttgggagggc
7321 -----+-----+-----+-----+-----+-----+ 7380
ttacggaacacggccggtccacgccaccgagtgcggatattagggtcgtaaaaccctccg
```

Figure 1 – page 11

```

cgaggcaggtggatcacgaggtcaggaattccagaccagcttgaacaacatggcgaaacc
7381 -----+-----+-----+-----+-----+-----+ 7440
gctccgtccacctaagtgtccttaaggtctgggtcgaacttgttgaccgctttgg

ccgtctctactaaaaatacaaaaattagctgggtgtgggtggcacatgcctgtaatcccag
7441 -----+-----+-----+-----+-----+-----+ 7500
ggcagagatgatTTTTATGTTTTAATCGACCCACACCACCGTGTACGGACATTAGGGTC

ctatttaggaggtgaggcaggagaatcacttgaaccgggaggcggaggttgcaatgag
7501 -----+-----+-----+-----+-----+-----+ 7560
gataaatcctccgactccgtcctcttagtgaacttgggccctccgcctccaacgttactc

ccgagattgcgccattgtactccagcctgggcaacaggagtgaacatcctctcgggaaa
7561 -----+-----+-----+-----+-----+-----+ 7620
ggctctaacgcggtaacatgaggtcggaccggtgtcctcactttgtaggagagcccttt

aaaaaaaaaagaaagaaatgccttgtgcagtaggcattctggctctgaggtttcatcttgtt
7621 -----+-----+-----+-----+-----+-----+ 7680
TTTTTTTTTCTTTCTTTACGGAACACGTCATCCGTAGACCAGACTCCAAAGTAGAACAA

acatggtgaacatcaggacagaaacaagtaagaatcatgcctgatgttattttctgcaca
7681 -----+-----+-----+-----+-----+-----+ 7740
tgtaccacttgtagtctctgtctttgttcattcttagtacggactacaataaaagacgtgt

ttcaaaacttgctaacaattttattgagattttaagcactctgtctctgatcttggggaaaa
7741 -----+-----+-----+-----+-----+-----+ 7800
aagtttgaacgattgttaaataactctaaaattcgtgagacagagactagaaccctttt

gcttagttgaaggcattagaaagagaggaggcggtgaagaatggggtagctttgaca
7801 -----+-----+-----+-----+-----+-----+ 7860
cgaatcaacttccgtaatctttctctcctccctccgcattcttaccatcgaaactgt

gaacggtgggaaccacctttagggtctgaaaggatttgcagatctctgagtgttgtaag
7861 -----+-----+-----+-----+-----+-----+ 7920
cttgccacccttgggtggaatcccagactttcctaaacgtctagagactcacaacacttc

atttgctcgacatttcatctgttctcttttagatcaaactgtgttattaaccttgtgcct
7921 -----+-----+-----+-----+-----+-----+ 7980
taaacgagctgtaaagtagacaagagaaaatctagtttgacacaataattggaacacgga

                                     S N C V I N L V P -
                                     517
gataaacaacaagtgttcaggaggcatatcggtgctgaaggtagaggagagagtgaga
7981 -----+-----+-----+-----+-----+-----+ 8040
ctatttgttgttcacgaagtcctccgtatagccacgacttccactcctcctcactct

D K Q Q V L Q E A Y (R) V L K
                                     I6 (56)
taaattatctttgaacatcagtaagagctgatgggttaagtcttgtttgttcccccttga
8041 -----+-----+-----+-----+-----+-----+ 8100
atttaatagaaacttgtagtcattctcgactaccaattcagaacaaacaagggggaact

```

**Exon 6**

Figure 1 – page 12

actaagagctcaaactctcttaatttatccattaaatgaataaggggtggcaaaagggg  
8101 -----+-----+-----+-----+-----+-----+ 8160  
tgattctcgagtttgagagaattaaataggtatttacttattccccaccgttttcccc  
aaggggcaggaataccccggatatggattactttccctcttaggttgcaaaaggtagtaa  
8161 -----+-----+-----+-----+-----+-----+ 8220  
ttccccgtccttatggggcctatacctaataaggggagaatccaacgttttccatcatt  
atccgaggtgacagttgtcactgaatgtgttaagggtatttgctttcttgactgtctctcc  
8221 -----+-----+-----+-----+-----+-----+ 8280  
taggctccactgtcaacagtgacttacacaattccataaacgaaagaactgacagagagg  
tatttgctgctgtacatgatcctagaagagcatctgtggagctataggaatctttgact  
8281 -----+-----+-----+-----+-----+-----+ 8340  
ataaacgacgacatgtactaggatcttctcgtagacacctcgatatccttagaaacgtga  
gactactaatgattgctttgaatatactctcttctagcatgtacagtgtttctcagggt  
8341 -----+-----+-----+-----+-----+-----+ 8400  
ctgatgattactaacgaaacttatatgagagaagatcgtagatgtcacaagaggtccga  
tctgatttcttatctgtcatgatttcagatctttgggaagttacagaagatggaactttt  
8401 -----+-----+-----+-----+-----+-----+ 8460  
agactaaagaatagacagtactaaagtctagaaacccttcaatgtcttctaccttgaaaa  
acattaactacttgctaaaaggaaagcttgaggagctccacagccttcattgtatcatg  
8461 -----+-----+-----+-----+-----+-----+ 8520  
tgtaattgatgaacgattttcctttcgaacgtcctcgagggtgcggaagtaacatagtac  
agatgtgtatcttcatgatagtagatgaaatattcagccagggtgcggtagctcacacctg  
8521 -----+-----+-----+-----+-----+-----+ 8580  
tctacacatagaagtactatcatctactttataagtcggtccacgccatcgagtgtggac  
taatcccagtgctgtgggagggccgagggcgccagatcacctgagggtcaggagtttgagac  
8581 -----+-----+-----+-----+-----+-----+ 8640  
attaggggtcacgacaccctccgggtccgcccgtctagtggactccagtcctcaaactctg  
cagcttggccaacatggagaaaactctgtcttactaaaaatacaaaaattagctgggtgt  
8641 -----+-----+-----+-----+-----+-----+ 8700  
gtcgaaccggttgtagctctttgagacagagatgatttttatgtttttaatcgaccaca  
gggtggtgcgtgctgtaatcccagctcctcgggagggtgaggtaggagaatagcttgaac  
8701 -----+-----+-----+-----+-----+-----+ 8760  
ccaccacgcacggacattaggggtcgaggagccctccgactccatcctcttatcgaacttg  
ccagaagtcagaggttgtagtgagccaggatcggtgacctgcactccagcctgggagaca  
8761 -----+-----+-----+-----+-----+-----+ 8820  
ggctcttcagtcctcaacgtcactcggtcctagcacggtgacgtgaggtcggaccctctgt  
gagcgagactccatctcaaaaaaaaaaaaaaaaaaaaaagattctagctgggtgggtgggt  
8821 -----+-----+-----+-----+-----+-----+ 8880  
ctcgcctctgaggtagagttttttttttttttttttttttctaagatcgaccacccacca

**Figure 1 – page 13**

```
      acatgcctgtactcccagctacttggatgctgaggcaagaggattgcttgagctctggag
8881  -----+-----+-----+-----+-----+-----+ 8940
      tgtacggacatgagggtcgatgaacctacgactccgttctcctaacgaactcgagacctc

      tttgtgtgcagcttgggcaatatagtgtgatcactgcctctaaaaaaatgtttttttttt
8941  -----+-----+-----+-----+-----+-----+ 9000
      aaacacacgtcgaaccggttatatcacactagtgtacggagatttttttacaaaaaaaaa

      tgagatggagtcctcactctgctgtccaggctgtagtgcagtggcaggatttcactctcact
9001  -----+-----+-----+-----+-----+-----+ 9060
      actctacctcagagtgtgacgacagggtccgacatcacgtcacgctcctaagtagagtga

      gcaacctccgcctcctgggttcaacaattcttttgcctcagcctccctagtagctggga
9061  -----+-----+-----+-----+-----+-----+ 9120
      cgttggaggcgaggaccgaagtgttgaagaaaacggagtcggagggatcatcgacctt

      ctacaggcgtgtgccaccatgccagctaatttttgtacttttagtagagacaagatttc
9121  -----+-----+-----+-----+-----+-----+ 9180
      gatgtccgcacacgggtggtacgggtcgattaaaaacatgaaaatcatctctgttctaaag

      accatattggtcaggctgatcttgaactcctgatctcatgatctgcctcagcctcccaaa
9181  -----+-----+-----+-----+-----+-----+ 9240
      tggataaccagtcgactagaacttgaggactagagtactagacggagtcggagggttt

      gtgctgggattacaggcatgagccgctgtgcctggccaaaattttttttaattgacaa
9241  -----+-----+-----+-----+-----+-----+ 9300
      cagcaccctaattgtccgtactcggcgacacggaccggttttaaaaaaaatttaactgtt

      cagatttttgagatttttgggtttacaaagctgtcatagaactcaaatacaaatatctata
9301  -----+-----+-----+-----+-----+-----+ 9360
      gtctaaaaactctaaaaaccaaattgttcgacagtatcttgagtttatgtttatagatat

      tagaaatgatttaattgatttagtgatgtctttgttagtatgtcattttacacgccagttc
9361  -----+-----+-----+-----+-----+-----+ 9420
      atctttactaaattactaaatcactacagaacaatcatacagtaaaatgtgcggtcaag

      actatctccacaaaaatgtacttataaaaaggtagaaacactattatagaatctagatct
9421  -----+-----+-----+-----+-----+-----+ 9480
      tgatagagggtgggtttttacatgaatattttccatctttgtgataatatcttagatctaga

      ccaggtttccagggtttttgaaattagctaaataaaatgttaagttcctgatcactcattt
9481  -----+-----+-----+-----+-----+-----+ 9540
      ggtccaaagggtccaaaaactttaatcgattttattttacaattcaaggactagttagtaaa

      gccttacatttttaaggataatattttaagataaaaatgtgttggtataaaagtaaaataac
9541  -----+-----+-----+-----+-----+-----+ 9600
      cggaatgtaaaattcctattataaaaatttctattttacacaacaatattttcattttattg

      aacattacaaaaagtttatattttttaatagaaatggggcttctgtgtcaccagggtgga
9601  -----+-----+-----+-----+-----+-----+ 9660
      ttgtaatgtttttcaatataaaaaattatctttacccagaacgacagtggggtccgacct
```

Figure 1 – page 14

```

atgcagtgtcactatctgtacccctctaactcctgagttagaggggtccagatagtgaca
9661 -----+-----+-----+-----+-----+-----+ 9720
tacgtcacagtgatagacatggggagattgaggactcaatctccccaggtctatcactgt

ctcactgtacccctctaactcctggggtcaaacaatcctcttgagtagctaggactccagg
9721 -----+-----+-----+-----+-----+-----+ 9780
gagtgcacatgggagattgaggacccgagtttgtaggagaactcatcgatcctgaggtcc

cacatgccaccatgccagctagtttttaatttctatatgggagagaggggtcttgctgt
9781 -----+-----+-----+-----+-----+-----+ 9840
gtgtacgggtggtacgggtcgatcaaaaatttaaagatataccctctctcccagaacgaca

gttgccaaggctagtctcaaactgctctcctccagcaagcctcccacttcggcctcctga
9841 -----+-----+-----+-----+-----+-----+ 9900
caacgggttccgatcagagtttgacgagaggaggtcggtcggagggtgaagccggaggact

gtcattgggattagaggcctgagccatcatacctggcaaagttatactattcttaagaga
9901 -----+-----+-----+-----+-----+-----+ 9960
cagtaaccctaactctccggactcggtagtatggaccgtttcaatatgataagaattctct

taaaagattatgaatactgatgatatacctctgttctacaatgacctggggctgcttttgg
9961 -----+-----+-----+-----+-----+-----+ 10020
atcttctaatacttatgactactataggagacaagatgttactggaccccgacgaaaacc

ttcagattggctaaaaatttaaatgtaagtaacctgaaaatctttatttaggagacagac
10021 -----+-----+-----+-----+-----+-----+ 10080
aagtctaaccgattttttaatttacattcattggacttttagaaataaatcctctgtctg

actcttagaatgtgattttattacctggttgataagccactgggaggaaaaaaaccttg
10081 -----+-----+-----+-----+-----+-----+ 10140
tgagaatcttacactaaaataatggacaacctattcggtgacctccttttttttggaaac

gcacttgactattgattgtaactaaagaggcagctgctatttggttcacaaaggggtcagct
10141 -----+-----+-----+-----+-----+-----+ 10200
cgtgaactgataactaacattgattttctccgtcgacgataaacaagtgttcccgatcga

taaacattgctattgatttttaatttgattttgttcccctattcctttctttgttatgt
10201 -----+-----+-----+-----+-----+-----+ 10260
atgtgtaacgataactaaaaatttaactaaaacaaggggataaggaaagaaacaataca

gggggtcaatgtaatcattaatcatcttgtttggactaatatgcctctgtttcagcatgggt
10261 -----+-----+-----+-----+-----+-----+ 10320
ccccagttacattagtaattagtagaacaacctgattatacggagacaaagtcgtacca

                                     H   G   -

ggggagttatatatttcagtgacgtctatacagaccttgaactgccagaagaaatcaggaca
10321 -----+-----+-----+-----+-----+-----+ 10380
ccctcaatataaagtcactgcagatatgctcggaacttgacgggtcttcttttagtcctgt

G   E   L   Y   F   S   D   V   Y   T   S   L   E   L   P   E   E   I   R   T   -

```

Exon 7

I6 (-56)

Figure 1 – page 15

cacaaagttttatggggtaggtgattttgttttagtttagtattaaggcagatggttgtac  
10381 -----+-----+-----+-----+-----+-----+ 10440  
gtgtttcaaaataccctatccactaaaacaaatcaaatacataattccgtctaccaacatg  
  
H K V L W  
  
atgtgcagaactcctttctgctaatagccaggatgaggctatatgagatcacatgggggtt  
10441 -----+-----+-----+-----+-----+-----+ 10500  
tacacgtcttgaggaaagacgattatcggtcctactccgatatactctagtgtaccccaa  
  
aggccatgaggccaagggttcattcttctctgccattcaaaagtgatagggttttggat  
10501 -----+-----+-----+-----+-----+-----+ 10560  
tccggtactccggttccaaggtaagaaggagacggttaagttttcactatcccgaaccta  
  
agtttaattcatctctttgagttatcgttttccaaattgtaaaatgtaaataataatata  
10561 -----+-----+-----+-----+-----+-----+ 10620  
tcaaattaagtagagaaactcaatagcaaaagggtttaacattttacattttattattatgt  
  
atctgccttatagggtctgttatgaagattaaatgggataaagaatgggaaaaatactttg  
10621 -----+-----+-----+-----+-----+-----+ 10680  
tagacggaatatcccgacaataacttctaattttaccctatttcttaccctttttatgaaac  
  
aaaactctagtgtggaaatgaggacaattgttcccaagctggtgtcctcttagtcccctt  
10681 -----+-----+-----+-----+-----+-----+ 10740  
ttttgagatcacacctttactcctgttaacaagggttcgaccacaggagaatcaggggaa  
  
atgttctcatcattattgtgttctttattcctttattatcattttaatagtctggaagtt  
10741 -----+-----+-----+-----+-----+-----+ 10800  
tacaagagtagtaataacacaagaaataaggaaataatagtaaaattatcagaccttcaa  
  
gagataaatgcatgcttttcatcagtcctatgaaatcaaaagttcttattctttaaataat  
10801 -----+-----+-----+-----+-----+-----+ 10860  
ctctattttacgtacgaaaagtagtcagatacttttagttttcaagaataagaattttatta  
  
attaactttattcttactatgtaataataaataaggtaccgttaacaagttggaaagtgcc  
10861 -----+-----+-----+-----+-----+-----+ 10920  
taattgaaataagaatgatacattattattttatccatggcaattgttcaacctttcacgg  
  
aaaaaaaaaaaaaaaaaagaaaaattactaagctggacacagtggcacacacctgtaac  
10921 -----+-----+-----+-----+-----+-----+ 10980  
tttttttttttttttttttttttttttaattgattcgacctgtgtcaccgtgtgtggacattg  
  
cccagatatttgggaggctgagtcaggaggattgcttgagcctaggagttcaggtaacagc  
10981 -----+-----+-----+-----+-----+-----+ 11040  
gggtctataaacctccgactcagtcctcctaacgaactcggatcctcaagtccatgtcg  
  
ctgggtgtcatagtaaaacctatctcttaaaaaaattacttataatcatataaccagtc  
11041 -----+-----+-----+-----+-----+-----+ 11100  
gaccacagtatcattttgggatagagaatttttttaataatgaatattagtatattgggtca  
  
gataacttctttttttttttttttttttttttttttttgagatggagtcctcgctctgtcaccagggc  
11101 -----+-----+-----+-----+-----+-----+ 11160  
ctattgaagaaaaaaaaaaaaaaaaaaaaaactctacctcagagcgagacagtggggtccg

Figure 1 – page 16

```

tagagtgcagtggcgcaatcttggctcactgcaacctccacttcccgggttcaagtgatt
11161 -----+-----+-----+-----+-----+-----+ 11220
atctcacgtcacgcggttagaaccgagtgacgttggaggtgaagggcccaagttcactaa

ctcctgcctcagcctcccaagtagctgggattacaggtgcatgccaccatgccagctaa
11221 -----+-----+-----+-----+-----+-----+ 11280
gaggacggagtcggaggggttcacgcaccctaagtgtccacgtacgggtggtacgggtcgatt

tttttgattttttagtagagatgggggttctactgtgttggccaggctggtctccaacacc
11281 -----+-----+-----+-----+-----+-----+ 11340
aaaaacataaaaatcatctctaccccaaagtgacacaaccgggtccgaccagaggttgtgg

tgacctcatgatctgccacctcggcctcccaaagtgctgggattacaggcatgagccac
11341 -----+-----+-----+-----+-----+-----+ 11400
actggagtactagacgggtggagcggagggtttcacgaccctaagtgtccgtactcggtg

cgcgctcggcctatgattttttttatactactttattcacataacagtgttttcaga
11401 -----+-----+-----+-----+-----+-----+ 11460
gcgcgagccggataactaaataaaaaatatgatgaaataagtgtattgtcacgaaaagtct

atgtggcggtactgcatacatgaatattatgcttgcagctgagtagaaccaatccaccagt
11461 -----+-----+-----+-----+-----+-----+ 11520
tacaccgcatgacgtatgtacttataatacgaacgtcgactcatcttggttaggtggtca

gagtgtcctgaagaatggttcctagagaccatcagctagcacaccagtccttaaccatgg
11521 -----+-----+-----+-----+-----+-----+ 11580
ctcacaggacttcttaccaaggatctctggtagtcgatcgtgtgggtcagaattggtacc

ctttctagaccttgagggatgctcaagttagcttctactgctaggatctatgttttaac
11581 -----+-----+-----+-----+-----+-----+ 11640
gaaagatctggaacctccctacgagttcaatcgaagatgacgatcctagatacaaaattg

taataccatgtcctaattaattatatagaagaatagttcccttaatactgtattaagtgt
11641 -----+-----+-----+-----+-----+-----+ 11700
attatggtacaggattaattaatatatcttcttatcaagggaattatgacataattcaca

tggtctggtctgtggttttttgttgttgttgttttttaggtgagtgctctgggtggtgctt
11701 -----+-----+-----+-----+-----+-----+ 11760
accgaccagacacaaaaaacaacaacaaaaaatccactcacagaccaccacgaa

                                     G E C L G G A L -

tatactggaaggaacttgctgtccttgctcaaaaaattgggttctgcctccacgtttgg
11761 -----+-----+-----+-----+-----+-----+ 11820
atatgaccttccttgaacgacaggaacgagttttttaaccaagacgggaggtgcaaacc

Y W K E L A V L A Q K I G F C P P R L V -

```

**Exon 8**



Figure 1 – page 17

11821 tcactgccaatctcattacaattcaaaacaaggaactggaaagagttatcggtaagatat 11880  
-----+-----+-----+-----+-----+-----+  
agtgacgggttagagtaatgttaagttttgttccttgacctttctcaatagccattctata  
  
T A N L I T I Q N K E L E R V I G  
  
11881 gacagacagcagggactattataactacagcttgaatgattgaaatgtggtgattagtaa 11940  
-----+-----+-----+-----+-----+-----+  
ctgtctgtcgtccctgataatattgatgtcgaacttactaactttacaccactaatcatt  
  
gtaacttctgaaggagtctcattgagggatactttctgttatctggaaatagctatcttg  
11941 -----+-----+-----+-----+-----+-----+ 12000  
cattgaagacttctcagagtaactccctatgaaagacaatagacctttatcgatagaac  
I8 (154)  
cctcctgtacaatggtaaccccccaaaaattttgatatttaataaagcactttgaagtca  
12001 -----+-----+-----+-----+-----+-----+ 12060  
ggaggacatgttaccattggggggtttttaaactataaattatttcgtgaaacttcagt  
I8 (213)  
ttcagtaaatagagtgaagtgtcagaaagataactgatgacatgcaaggaagaaaatca  
12061 -----+-----+-----+-----+-----+-----+ 12120  
aagtcatttatctcacttcacgagtctttctattgactactgtacgttccttcttttagt  
  
tctttataacgtgtttgctccttgctgtctgagcaaggcaacaactgggggagtgctgga  
12121 -----+-----+-----+-----+-----+-----+ 12180  
agaaatattgcacaaacgaggaacagacgactcgttcggtgttgacccctcacgacct  
  
gatgaaccgtgaataaattctatttttaggtgactgtcgtttttgttctgcaacatttcg  
12181 -----+-----+-----+-----+-----+-----+ 12240  
ctacttggcacttatttaagataaaaaatccactgacagcaaaacaaagacgttgtaaagc  
  
D C R F V S A T F R -  
  
cctcttcaaacactctaagacaggaccaaccaagagatgccaagttatttacaatggagg  
12241 -----+-----+-----+-----+-----+-----+ 12300  
ggagaagtttgtagattctgtcctgggttggttctctacggttcaataaatgttacctcc  
  
L F K H S K T G P T K R C Q V I Y N G G -  
860  
aattacaggacatgaaaaagaactaatgtttgatgccaattttacatttaaggtaaataa  
12301 -----+-----+-----+-----+-----+-----+ 12360  
ttaatgtcctgtactttttcttgattacaaactacggttaaaatgtaaattccatttatt  
  
I T G H E K E L (M) F D A N F T F K  
  
aacaatttccatgacttctggtattctttctgctcttgcccttgctccagctatcttttc  
12361 -----+-----+-----+-----+-----+-----+ 12420  
ttgttaaagggtactgaagaccataagaaagacgagaacgggaacgaggtcgatagaaaag  
  
ttgactttgcattgcctcccatTTTTCTGGTGTGGTTTGTGTGTGTGTGTTAAATG  
12421 -----+-----+-----+-----+-----+-----+ 12480  
aactgaaacgtaacggagggtaaaaagaccacaaccaacacacacacacaaatttac

Exon 9

**Figure 1 – page 18**

```
tatgtgtgtgtttcaagtggagtaaaaaagcattttttccccaataacttatttatttatt
12481 -----+-----+-----+-----+-----+-----+ 12540
atacacacacaaagttcacctcatttttttcgtaaaaaaggggttatgaataaataataa

gacaggggtctcgctctgtcaccagggtggagtgcagtagcacatcatagttcactgca
12541 -----+-----+-----+-----+-----+-----+ 12600
ctgtcccagagcgagacagtgggtccgacctcacgtcatcgtgttagtatcaagtgcgt

gcctgacctcctgggctcaagcgatcctcccacctcaggcttctgagtagctaggactac
12601 -----+-----+-----+-----+-----+-----+ 12660
cggactggaggacccgagttcgctaggagggtggagtccgaagactcatcgatcctgatg

agactcatcaccacacctggctaataatttgtattttttgtagagatggggtttggccatg
12661 -----+-----+-----+-----+-----+-----+ 12720
tctgagtagtggtgtggaccgattataaacataaaaaacatctctaccccaaacggtac

ttgcccagactgggtcttgaactcctgggctcaagtgatgtgccacctcagcctcccaaa
12721 -----+-----+-----+-----+-----+-----+ 12780
aacgggtctgaccagaacttgaggacccgagttcactacacgggtggagtgcggagggtt

gtgctgggattacaggcgtgaaccaccgtgccagccctcaatatttattataaaaatgt
12781 -----+-----+-----+-----+-----+-----+ 12840
cacgaccctaattgtccgcacttgggtggcacgggtcgggagttataaataaatatttttaca

ttttggccaggtgcgggtgggtcacacctgtaatcctagcactttgggagggtgaggcagg
12841 -----+-----+-----+-----+-----+-----+ 12900
aaaaccggtccacgccaccgagtggtggacattaggatcgtgaaaccctccgactccgtcc

cagattacctgagggtcaggagttcgagaccagcctgacgaacatggcgaaaaccatctc
12901 -----+-----+-----+-----+-----+-----+ 12960
gtctaattggactccagtcctcaagctctgggtcggactgcttgtaccgcttttgggtagag

tactaataaaaaatacaaaaattagccggggtgggtgggtgctgtaatcccaactac
12961 -----+-----+-----+-----+-----+-----+ 13020
atgattatttttatgttttttaatcggcccgaccaccacccacggacattaggggtgatg

tctggagggtgaggcaggagaattgcatgaaccgggagggtggaggttgagggtgagctga
13021 -----+-----+-----+-----+-----+-----+ 13080
agacctccgactccgtcctcttaacgtacttgggcctccacctccaactccactcgact

gatcatgccattgcactccagcctgggcaacagagtgcagactccatctcaaaaaaaaaaa
13081 -----+-----+-----+-----+-----+-----+ 13140
ctagtacggtaacgtgaggtcggaccggtgtgtcactctgaggtagagttttttttttt

aaaaaaaaagaagtttttgaatacagaaaagttaatagtacaatgaataccacataggca
13141 -----+-----+-----+-----+-----+-----+ 13200
ttttttttcttcaaaaacttatgtcttttcaattatcatgttacttatgggtgtatccgt

ttacctatatttcagcaattgagaacatttttccatgtttgtgtgtttatatgtgtatat
13201 -----+-----+-----+-----+-----+-----+ 13260
aatggatataaagtcgttaactcttgtaaaaagggtacaaacacacaaatatacacatata
```

Figure 1 – page 19

atataatatatattttttgctgagccattgaaaataagttgcagatattatgacatttta  
13261 -----+-----+-----+-----+-----+-----+ 13320  
tatataatatataaataaacgactcggtaacttttattcaacgtctataatactgtaaaat  
cccttaaataatttcagcatgcgtcccataggaatgtaatatccctctgcataatcacaat  
13321 -----+-----+-----+-----+-----+-----+ 13380  
gggaattttataaagtcgtacgcagggtatccttacattataggagacgtattagtgtta  
accattacacacctaagaaaactttttacaagaagcctcattcagacattggattaatag  
13381 -----+-----+-----+-----+-----+-----+ 13440  
tggtaatgtgtggattcttttgaaaaatgttcttcggagtaagtctgtaacctaattatc  
ggctatagagaagtaggatggaaaagagtaggagtatgtacaatagtatttcaattgttt  
13441 -----+-----+-----+-----+-----+-----+ 13500  
ccgatatctcttcatcctaccttttctcatcctcatacatgttatcataaagttaacaaa  
aattgtgtcaaggaattaagaaatttttaattgttgatgatggcactaattggcattttta  
13501 -----+-----+-----+-----+-----+-----+ 13560  
ttaacacagttccttaattcttttaaaattacaacctaactaccgtgattaaccgtaaaaat  
ctgccctgtgcatagtaagatttgttttctcaaaatggaaaagttcaggctttggaatca  
13561 -----+-----+-----+-----+-----+-----+ 13620  
gacgggacacgtatcattctaaacaaaagagttttaccttttcaagtcgaaaccttagt  
gatacctgggttcaaattctggctctattattattgttttttttttttttctgaatgt  
13621 -----+-----+-----+-----+-----+-----+ 13680  
ctatggaccaagttaaagaccgagataataataacaaaaataaaaaaaaaagacttaca  
cactagacaaaacttttattgaagcataaattgtggtacagaaatacatttttaactgattt  
13681 -----+-----+-----+-----+-----+-----+ 13740  
gtgatctgtttgaaaataaacttcgtatttaacaccatgtctttatgtaaaattgactaaa  
aagtccaacaccagtgaaaggagagattatggcaccaaaaactttcccttttctatcatac  
13741 -----+-----+-----+-----+-----+-----+ 13800  
ttcaggttggtggtcactttcctctctaataccgtggttttgaaagggaaggatagtatg  
catgatttagattatgatgcaatctacatttctcttttctaggctttgtcccatacaaat  
13801 -----+-----+-----+-----+-----+-----+ 13860  
gtactaaatctaatactacgttagatgtaaagagaaaagatccgaaacagggtatgttta  
ttgggcagtttttcaacattagaatttcaacattagaattcttaattctattaggaaaaa  
13861 -----+-----+-----+-----+-----+-----+ 13920  
aaccggtcaaaaagttgtaattcttaagttgtaattcttaagaattaagataatccttttt  
aagcaacaaaaaaaccagacctcaagtcaacaaatctattggatattgtttatgaacgaa  
13921 -----+-----+-----+-----+-----+-----+ 13980  
ttcgttggttttttgggtctggagttcagttggttagataacctataacaaatacttgctt  
gtccacgttaagcattgggtcctcaaaacagagctcctcaaaatattaggtgctgtgctca  
13981 -----+-----+-----+-----+-----+-----+ 14040  
caggtgcaattcgttaaccaggagttttgtctcgaggagttttataatccacgacacgagt

Figure 1 – page 20

```

ttacagaatcaaactgatcacactgattgaaaacttcctcaatgaaattttcaatcaaca
14041 -----+-----+-----+-----+-----+-----+ 14100
aatgtccttagtttgactagtgtgactaacttttgaaggagttactttaaaagttagttgt

acatgcttcaaataaaaagtcaaacagtggtccaaccacttgacttcaaaccaagtagatt
14101 -----+-----+-----+-----+-----+-----+ 14160
tgtacgaagtttattttcagtttgcacaaaggttggtgaactgaagtttggttcattctaa

ttaggttttagaaacactaaaaaagggtgtttcatttataaatacagaaggaacaaaaaca
14161 -----+-----+-----+-----+-----+-----+ 14220
aatccaaatccttgtgattttttccacaaagtaaatatttatgtcttccttgtttttgt

tcactgcatcaatccagaaattatcaaaatatttagaggacaagaaatataaaatttagt
14221 -----+-----+-----+-----+-----+-----+ 14280
agtgcagtagtttaggtctttaatagttttataaatctcctgttctttatattttaaatca

caactttgctgctttctcagttccttaaaatcccagagtatctgcaaatatagctaaaaa
14281 -----+-----+-----+-----+-----+-----+ 14340
gttgaaacgacgaaagagtcagggaattttaggggtctcatagacgtttatatcgattttt

gtaccaactcttgaaagcctatattactagtcatttcccattgagtattttggaatttta
14341 -----+-----+-----+-----+-----+-----+ 14400
catgggttgagaactttcggatataatgatcagtaaagggttaactcataaaaccttaaaat

tttatgttctacttatttattcatgtattctgctttatgatgtttatctgaataatctgg
14401 -----+-----+-----+-----+-----+-----+ 14460
aaatacaagatgaataaataagtacataagacgaaataactacaaatagacttattagacc

acaaattctcattctgggcagtcattcgtttcatcctatgaatgccatgggtgagggaaac
14461 -----+-----+-----+-----+-----+-----+ 14520
tgtttaagagtaagaccgcagtaagcaaagtaggatacttacgggtaccactccctttg

agtgtagtttagaggaacagatgaagtcagaacactcacatgcatcacgggtcacagaactt
14521 -----+-----+-----+-----+-----+-----+ 14580
tcacatcaatctccttgtctacttcagtcttgtagtgtagtgtagtgccagtgtcttgaa

taagtcacaagacagaaaagaaatcgattctgctttggatcaaagtttatagaacactac
14581 -----+-----+-----+-----+-----+-----+ 14640
attcagtggttctgtcttttcttagctaagacgaaacctagtttcaaatatcttgtgatg

ttaatggaaactagtggaatggctgctaaaggaaaagttaagggtgaatgatccaagctg
14641 -----+-----+-----+-----+-----+-----+ 14700
aattacctttgatcacctttaccgacgatttcttttcaattccacttactaggttcgac

acttgattactgaatccagaacaaaattatgctaaatctctctggtaattaactaaataa
14701 -----+-----+-----+-----+-----+-----+ 14760
tgaactaatgacttaggtcttggttttaatacagatttagagagaccattaattgatttatt

aaatcattttatactattatttagtaagtttagtaaaaggcgtgctactcattagatgctaa
14761 -----+-----+-----+-----+-----+-----+ 14820
tttagtaaaatatgataataaatcattcaatcatttccgcacgatgagtaatctacgatt

```

**Figure 1 – page 21**

```
tctcatttactgaggaacacagaattgtatatgttttctggctctattatttattacttg
14821 -----+-----+-----+-----+-----+-----+ 14880
agagtaaagtactccttgtgtcttaacatatacaaaagaccgagataataaataatgaac

ggtaaacttgaacaagtcacccaaaattcgttgggttacagtttgttctactgtaaaagca
14881 -----+-----+-----+-----+-----+-----+ 14940
ccatttgaacttgttcagtggttttaagcaaccaatgtcaaacaagatgacattttcgt

gggataataataacttacttttgagaatttctataaggattagcaataatgtagcaaaaca
14941 -----+-----+-----+-----+-----+-----+ 15000
ccctattattatgaatgaaacgtcttaagatatcttaacgttattacatcgttttgt

ctgggtacatactgcaagttcagtgaaaagaagatactgtcattatttgttccaaaagtg
15001 -----+-----+-----+-----+-----+-----+ 15060
gacccatgtatgacgttcaagtcacttttcttctatgacagtaataaacaaggttttcac

gaagaacttactattaatatttcatTTTTCTGATTTATTTATTTATCTATTTTAGAGACA
15061 -----+-----+-----+-----+-----+-----+ 15120
cttcttgaatgataattataaaagtaaaaagactaaataaataaatagataaaatctctgt

aagtctctctctgtcacccatgctggagtgtagtggcacagtcatagctcactgtaacct
15121 -----+-----+-----+-----+-----+-----+ 15180
ttcagagagagacagtgggtacgacctcacatcacgtgtcagtatcgagtacattgga

caaactcctgggtcaagcgattctcccatctcagcctccaagtagctgggactacagg
15181 -----+-----+-----+-----+-----+-----+ 15240
gtttgaggacccgagttcgctaagagggttagagtcggagggttcacgacctgatgtcc

catgtgtcaccatgcctggctaattttttattttttatttttttgggtgagacagggtt
15241 -----+-----+-----+-----+-----+-----+ 15300
gtacacagtggtacggaccgattaaaaaataaaaaataaaaaacaaccactctgtccaa

tttttttttttcttttttgagaccaagtctcgctctgtcactcaggctggagtgcagtgg
15301 -----+-----+-----+-----+-----+-----+ 15360
aaaaaaaaaagaaaaaactctggttcagagcgagacagtgagtcgacctcacgtcacc

cccgatctcgggtcactgcaagctccacctcccggttcacgccattctcctgccttagc
15361 -----+-----+-----+-----+-----+-----+ 15420
gggctagagccgagtgacgttcgaggtggagggcccaagtgcggttaagaggacggaatcg

ctcccaagtagctgggactacaggtgcccgccaccacccggctaattttttgtatttt
15421 -----+-----+-----+-----+-----+-----+ 15480
gaggggttcacgacctgatgtccacgggcggtggtgtgggcccattaaaaaacataaaa

tagtagagttgggatttcaccgtgttagccaggatggtctcaatctcctggcctcgtgat
15481 -----+-----+-----+-----+-----+-----+ 15540
atcatctcaaccctaaagtggcacaatcggtcctaccagagtttagaggaccggagcacta

ccaccgcctcggcctcccaaagtgtgtggattacaggcgtgagccaccactcccgccca
15541 -----+-----+-----+-----+-----+-----+ 15600
ggtgggaggagccggagggtttcacgacctaatgtccgcactcggtggtgagggccggt
```

**Figure 1 – page 22**

```
agacaggttcttatattgccaggtggtcttgaactcctggcctcaagcaattctccca
15601 -----+-----+-----+-----+-----+-----+ 15660
tctgtccaagaatataacgggtccgaccagaacttgaggaccggagttcgtaaagggt

cctcagcctcccaaagttgcaagcatgtgtcactgtgcctggcttcttctgatttttttg
15661 -----+-----+-----+-----+-----+-----+ 15720
ggagtccggagggtttcaacgttcgtacacagtgcacggaccgaagaagactaaaaaac

gtctaaatagcatctccagatttcttttttttttaatttaaaaaatgtattttattct
15721 -----+-----+-----+-----+-----+-----+ 15780
cagatttatcgtagagggtctaaagaaaaaaaaaattaaattttttacataaataaaga

ttatttagacacagggctcttgctatgttgccacactggggtacactggctattcacagg
15781 -----+-----+-----+-----+-----+-----+ 15840
aataaatctgtgtcccagaacgatacaacgggtgtgaccccatgtgaccgataagtgtcc

tgtaagcatagcccactatagtcttgaactcctggcctcaagggatccttccacctcagc
15841 -----+-----+-----+-----+-----+-----+ 15900
acattcgatatcgggtgatatcagaacttgaggaccggagttccctaggaagggtggagtgc

cttccaagtctgggactacatctggctaagcatcttcaaatttcttattttattttat
15901 -----+-----+-----+-----+-----+-----+ 15960
gaagggttcagaccctgatgtagaccgattcgtagaagtttaagaataaataaataaata

ttatttttgagatggagtcttgctctgttgccctaggctggagtgcagtgactcaatctca
15961 -----+-----+-----+-----+-----+-----+ 16020
aataaaaaactctacctcagaacgagacaacggatccgacctcacgtcactgagttagagt

gctcactgcaacctctgcctcctgggttcaagccgattctcctgccttagcctctcgagt
16021 -----+-----+-----+-----+-----+-----+ 16080
cgagtgcgttggagacggaggaccaagtccggctaagaggacggaatcggagagctca

agcagggattacaggcgtgtgccaccacacccagctaattttttatatttttattagagac
16081 -----+-----+-----+-----+-----+-----+ 16140
tcgtccctaattgtccgcacacgggtggtgtgggtcgattaaaaatataaaaataatctctg

agggtttcaccatgttggccaggctggtctcgaactcctgacctcaggtaatctaccgcg
16141 -----+-----+-----+-----+-----+-----+ 16200
tcccaaagtggtaacaaccgggtccgaccagagcttgaggactggagtccattagatgggcg

ctcggcctcccaaagtgtggtggtgattacaggcgtgagccactgtgcccggtgcattctca
16201 -----+-----+-----+-----+-----+-----+ 16260
gagccggagggtttcacgaccctaattgtccgcactcgggtgacacgggcccgcgtagaagt

aatttcttaataactccttggtatagtggagcccttaatgcttttactaatgcactgct
16261 -----+-----+-----+-----+-----+-----+ 16320
ttaagaatttatgaggaaccatatcacctcgggaattacgaaaagtgattacgtgacga

ccttgatgtgctgcctattccagtagatacacagaatcagagtggtaagggcctttgaaa
16321 -----+-----+-----+-----+-----+-----+ 16380
ggaactacacgacggataaggtcatctatgtgtcttagtctcaccattcccggaaacttt
```

**Figure 1 – page 23**

```
ccattgatttgttctagtggctttcaaaaaccatttttaatacaattattttttaagcaa
16381 -----+-----+-----+-----+-----+ 16440
ggtaactaaacaagatcaccgaaagtttttggtaaaaattatgttaataaaaaattcggt

aatgttttatatatatatatatatgggttttttttttttgagatggagtcttgctctggt
16441 -----+-----+-----+-----+-----+ 16500
ttacaaaatatatatatatataacaaaaaaaaaaaaactctacctcagaacgagacaa

gccaggctagagtgcagtggtgcaatctcggtcactgcaacctcagcctccctgggtc
16501 -----+-----+-----+-----+-----+ 16560
cgggtccgatctcacgtcaccacgttagagccgagtgacgttgagatcggagggaccaag

aagtgattttcctgcctcagcctccccagtagcttggactacaggtgggtgccaacgcac
16561 -----+-----+-----+-----+-----+ 16620
ttcactaaaaggacggagtcggaggggtcatcgaacctgatgtccaccacggttgctgt

ctggctaatttttgcatttttagtagagacagggtttcaccatggtggccaggctggtct
16621 -----+-----+-----+-----+-----+ 16680
gaccgattaaaaacgtaaaaatcatctctgtcccaaagtgtacaaccggtccgaccaga

taaactcctgacctcaggtgatctgccacctcggcctcccaaagtactaggattataga
16681 -----+-----+-----+-----+-----+ 16740
at ttgaggactggagtcactagacgggtggagccggagggtttcatgatcctaataatct

tgtgagccactgtgccagccagaaatgcactttaaaaaccaccagtccttgccctgggca
16741 -----+-----+-----+-----+-----+ 16800
acactcggtgacacgggtcgggtctttacgtgaaatttttgggtggtcaggaacggaccgt

tggtgggtcacacctgtaatcccagcactttgggagggtgaggcgggtggattacctgag
16801 -----+-----+-----+-----+-----+ 16860
accaccgagtggtggacattagggctgtgaaacctccgactccgccacctaatggactc

gtcaggagtttcgagaccagcctgatcaacatgatgaaacctgtctctactaaaaataca
16861 -----+-----+-----+-----+-----+ 16920
cagtcctcaagctctggtcggactagttgtactactttgggacagagatgatttttatgt

aaaattagccgggctggtggcgtgtgcctgttatcccagctactcgagaggctaaggca
16921 -----+-----+-----+-----+-----+ 16980
ttttaatcggccccgcaccaccgcacacggacaatagggtcgatgagctctccgattccgt

ggagaatcggcttgaaccaggaggcagaggttgacgtgagctgagattgagtcactgca
16981 -----+-----+-----+-----+-----+ 17040
cctcttagccgaacttgggtcctccgtctccaacgtcactcgactctaactcagtgacgt

ctccagcctgggcaacagagcaagacttcatctcaaaaacaaacaaagaaaaaacc
17041 -----+-----+-----+-----+-----+ 17100
gaggtcggacccgttgtctcgttctgaagtagagtttttgtttgtttcttttttgg

cccaatagtccaaagccctaattttccccccattatttattttttaatgggcaaatttt
17101 -----+-----+-----+-----+-----+ 17160
gggttatcaggtttcgggattaaaaggggggtaataaataaaaaaattaccggttataaa
```

**Figure 1 – page 24**

```
17161 aaaaattgtatatatatatttatgggtgtacaatgggatgttttgacatatgtatacattatg 17220
-----+-----+-----+-----+-----+
17221 tttttaacatatataataaccacatgtttaccctacaaaactgtatacatatgtaatac
gaatgactaaatcaagataattaaaaatgcattacctcacatactcaccattttattgtga
17221 -----+-----+-----+-----+-----+ 17280
17221 cttactgatttagttctattaatttttacgtaatggagtgtatgagtggtaaataaacact
tgagatcaaagtctactccttttagcaattttctttttcttttcttttctttcttttattt
17281 -----+-----+-----+-----+-----+ 17340
17281 actctagtttcagatgagaaaatcgttaaaagaaaaagaaaagaaaagaaataaaa
ctttttttttttttttttttgaggcagaatcttgctctgtcgccaggctggagtgcagtggc
17341 -----+-----+-----+-----+-----+ 17400
17341 gaaaaaaaaaaaaaaaaaactccgtcttagaacgagacagcgggtccgacctcacgtcacg
acaatctcggtcactgcaacctccacctctcaggttcaagcgattatcctgcctcagcc
17401 -----+-----+-----+-----+-----+ 17460
17401 tggtagagccgagtgcgttgagggtggagagtcgaagttcgctaataaggacggagtcgg
ttccaagtagctgggactataggtgtgtgctaccacaccagctaattttttgtattttt
17461 -----+-----+-----+-----+-----+ 17520
17461 aagggtcatcgacctgatatccacacacgatgggtgtgggtcgattaaaaaacataaaaa
agtagagatggagtttcaccatgttggccaggctgggtcttgaactcctgacctcaggtga
17521 -----+-----+-----+-----+-----+ 17580
17521 tcatctctacctcaaagtgggtacaaccggtccgaccagaacttgaggactggagtccact
tccccctgcttcagcctcccaaagtgtgggattacaggcgaggtgccagccttttta
17581 -----+-----+-----+-----+-----+ 17640
17581 agggggacgaagtcggagggtttcacgacctaatgtccgcgtccacgggtcggaatat
gcaattttccaatacattgtttattaactatagtcaccatgttgtataatagatctctttta
17641 -----+-----+-----+-----+-----+ 17700
17641 cgtaaagggttatgtaacaataattgatatcagtggtacaacatattatctagagaaatt
cttattcctgataactgaaattttgtatcctttaaccaacatctatcctgttcaccacct
17701 -----+-----+-----+-----+-----+ 17760
17701 gaataaggactattgactttaaaacataggaaattgggtgtagataggacaagggtgggga
gccctcccacccctaccccccagccctggtaagagcctctactcttcacctctatgagt
17761 -----+-----+-----+-----+-----+ 17820
17761 cgggaggggtgggggatgggggtcggggaccattctcggagatgagaagtggagatactca
tcaactttttgaaattccacatatataatctagcgaggttatgcagtatttggttttcagt
17821 -----+-----+-----+-----+-----+ 17880
17821 agttgaaaaactttaagggtgtatattagatcgctccaatacgtcataaacaataaagtcac
cctgcagatatgacattttttgggttcaactttttgtttgtttttgagatggaatctcact
17881 -----+-----+-----+-----+-----+ 17940
17881 ggacgtctatactgtaaaaacccaagttgaaaaacaacaaaaactctaccttagagtga
```



Figure 1 – page 25

```
cttgctgccccaggctggagtgagtgaggctgatcttggtcactgcaatctccgcctcct
17941 -----+-----+-----+-----+-----+-----+ 18000
gaacagcgggtccgacctcacgtcaccgcactagaaccgagtgacgttagaggcggagga

gggttcaagccattctcctgtctcagcctcctgagtagcagggattacaggcgcctgcc
18001 -----+-----+-----+-----+-----+-----+ 18060
cccaagttcggtaagaggacagagtcggaggactcatcgtccctaattgtccgcggacggt

ccgtgcccagctaatttttgtatttttagtagagacgggggtttcactatggtggccaggc
18061 -----+-----+-----+-----+-----+-----+ 18120
ggcacgggtcgattaaaaacataaaaatcatctctgccccaaagtatacaaccgggtccg

tggtctctaactcctgacctcagacgatctgcctgcattggcctccaaaactgctgggat
18121 -----+-----+-----+-----+-----+-----+ 18180
accagagattgaggactggagtcgtctagacggacgtaaccggagggtttgacgacctta

tacaggcatgagacactgcgaccggccaaacatttttttaatgcataatagatgtacata
18181 -----+-----+-----+-----+-----+-----+ 18240
atgtccgtactctgtgacgctggcgggtttgtaaaaaaattacgtattatctacatgtat

ctttcagggcacatctgataatttaatatattcatataatttgtagatcaagtcaatg
18241 -----+-----+-----+-----+-----+-----+ 18300
gaaagtcccgtgtagactattaaattatataagtatattaaacatgtctagttcagttac

taactggtatatccatcgccttaaacatttgctttttctttattctaggaacccatttga
18301 -----+-----+-----+-----+-----+-----+ 18360
attgaccatataggtagcgggaatttgtaaacagaaaagaaataagatccttgggtaaact

attattcttttctagctattttgaaatatacaatagattattgtgaactatagtcacct
18361 -----+-----+-----+-----+-----+-----+ 18420
taataagaaaagatcgataaaaactttatatgttatctaataacacttgatatcagtggga

actgatccatcgaacactaggtcttattttcttcttattaaactggattttgtactcatta
18421 -----+-----+-----+-----+-----+-----+ 18480
tgactaggtagcttgatccagaataaagaagaataatttgacctaaaacatgagtaat

atcaagctctcttcacacctccctcactctacctggcgtctggtaaccaccaatctactctc
18481 -----+-----+-----+-----+-----+-----+ 18540
tagttcgagagaagtaggaggggtgagatggaccgcagaccattggtggttagatgagag

tattatcatgaggtccacttttttagctcccacatatcagcgagaacatgtaatatctgt
18541 -----+-----+-----+-----+-----+-----+ 18600
ataatagtactccaggtgaaaaaatcgagggtgtatagtcgctcttgtagattataagca

ctttttgaggttggttattttctttaacataatgacctgcagttccatgcatgttgctg
18601 -----+-----+-----+-----+-----+-----+ 18660
gaaaaactccaaccgaataaagagaattgtattactggacgtcaaggtagctacaacgac

caggtgacaggatttcttcttttattttattttattttttttgagacagagtcctt
18661 -----+-----+-----+-----+-----+-----+ 18720
gtccactgtcctaaggaagaaaataaaaataaaaataaaaaaactctgtctcagaa
```

Figure 1 – page 26

```
actctgtctcccaggttggagtgagtggtgctcactgaaacctccggctg
18721 -----+-----+-----+-----+-----+-----+ 18780
tgagacagaggggtccaacctcacgtcacgcactagaaccgagtgactttggaggccgac

ccaggttcaagtaattctcctgcctcagcctcctgagtagctgggactacaggcgctgc
18781 -----+-----+-----+-----+-----+-----+ 18840
ggtccaagttcattaagaggacggagtcggaggactcatcgaccctgatgtccgcgcacg

caccacaccaactaatttttttttttttttttttttttttttttttttttttttttttttt
18841 -----+-----+-----+-----+-----+-----+ 18900
gtggtgtgggttgattaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

ttttttttgagacggagtctcgctctgtcgccaggctggagtgcagtggcgggatctcg
18901 -----+-----+-----+-----+-----+-----+ 18960
aaaaaaaaactctgcctcagagcgagacagcgggtccgacctcacgtcacgcacctagagc

gctcactgcaagctccgcctcccgggttcacgccattctcctgcctcagcctcccaagta
18961 -----+-----+-----+-----+-----+-----+ 19020
cgagtgcagttcgaggcggagggcccaagtgcggtaagaggacggagtgcggaggggtcat

gctgggactacaggcgcccgccactacgcccggctaattttttgtatttttagtagagac
19021 -----+-----+-----+-----+-----+-----+ 19080
cgacctgatgtccgcgggcggtgatgcgggcccattaaaaaacataaaaatcatctctg

gggggtttcacggttttagccgggatggtctcgatctcctgacctcgtgatccgcccgcct
19081 -----+-----+-----+-----+-----+-----+ 19140
cccaaagtggcaaaatcgccctaccagagctagaggactggagcactaggcgggcgga

cggcctcccaaagtgcgtgggattacaggcgtagaccgcgcccggccactaattttt
19141 -----+-----+-----+-----+-----+-----+ 19200
gccggaggggtttcacgacctaatgtccgcactcgggtggcggggcccgggtgattaaaaa

gtatttttagtagagatgggggtttcacatggtggcaaggctggtctcgaactcctgacct
19201 -----+-----+-----+-----+-----+-----+ 19260
cataaaaatcatctctaccccaaagtgtacaaccgttccgaccagagcttgaggactgga

caggtgatccgcctgcctcggcctcccaaagtgcgtgggattacaggcttgggccaccgca
19261 -----+-----+-----+-----+-----+-----+ 19320
gtccactaggcggacggagccggaggggtttcacgacctaatgtccgaaccgggtggcgt

ccaggccaggatttcttcttttttcaagtctgaatagtattccagtgtgtacataacta
19321 -----+-----+-----+-----+-----+-----+ 19380
ggtccggtcctaaggaagaaaaagtccagacttatcataaggtcacacatgtatatgat

ctacgttttctttatccgttcacgtgtgttgagtcttctttttttcttagtttagctaaag
19381 -----+-----+-----+-----+-----+-----+ 19440
gatgcaaaagaaataggcaagtagacaaactcagaagaaaaaagaatcaaatcgatttc

atatttttttttttttcaaaaaactaattttttcattttgttgatcttctgtattttttta
19441 -----+-----+-----+-----+-----+-----+ 19500
taaataaaataaaaaagttttttgattaaaaagtaaaacaactagaagacataaaaaaat
```

Figure 1 – page 27

```

gtctcaatttcatttatttctgctgtgatgttctttctttccttctactaattttgagtt
19501 -----+-----+-----+-----+-----+-----+ 19560
cagaggttaaagtaaataaagacgacactacaagaaagaaaggaagatgattaaaactcaa

tgatttggttcttgcttttatagttccctcatgggcattactaggttgtttatttgaagtc
19561 -----+-----+-----+-----+-----+-----+ 19620
actaaacaagaacgaaaatatcaaggagtagccgtaatgatccaacaaataaacttcag

tgttccttctttccttcattccttccttcctccctccctccctccctcccttcttccttc
19621 -----+-----+-----+-----+-----+-----+ 19680
acaaggaagaaaggaagtaaggaaggaaggagggagggagggagggagggagaaggaag

cttcattctttctttttttttttgagaggggaatctcgctctgttgcccaggttgagtgctc
19681 -----+-----+-----+-----+-----+-----+ 19740
gaaggttaagaaagaaaaaaaactctcccttagagcgagacaacgggtccaacctcacg

agtggcgcgatctcagctcactgcaacctccacctcccggttcaagcaattctcctgtc
19741 -----+-----+-----+-----+-----+-----+ 19800
tcaccgctgtagagtcgagtgacgttgagggtggagggcccaagttcgtaagaggacag

tcagcctcccaagtagctgggattacaggcatgcaccaccacgcctggctaatttttttg
19801 -----+-----+-----+-----+-----+-----+ 19860
agtcggaggggttcacgaccctaattgtccgtacgtggtggtgcggaaccgattaaaaaac

tatttttagtagagacgggggtttcaccatattggccaggctggtcttgaactcctgactc
19861 -----+-----+-----+-----+-----+-----+ 19920
ataaaaatcatctctgccccaaagtgtataaccggtccgaccagaacttgaggactgag

tgcccgccctcagcctcccaaagtctgggattacaggtgttagccattgtgcccggccct
19921 -----+-----+-----+-----+-----+-----+ 19980
acgggcgagtcggaggggttcaagaccctaattgtccacaatcggtaacacgggcccggga

tcttttcttttcttcttcttcttcttctcagggtctcactctgtcacctggactggagtga
19981 -----+-----+-----+-----+-----+-----+ 20040
agaaaggaaagaagaagaagaagaagagtcagagtgagacagtggaacctgacctcacgt

gtggtgcaatcatggctcacagcagctttgacctcctgggctcaggcaatcctcctaccc
20041 -----+-----+-----+-----+-----+-----+ 20100
caccacgttagtagcagagtgctcgtaaacctggaggacccgagtcggttaggaggatggg

cagcatcccaagtagctgggactaaggctaccatgcctggctgatttttgattttctgt
20101 -----+-----+-----+-----+-----+-----+ 20160
gtcgtaggggttcacgacctgattccgatggtagcgaccgactaaaaacataaaagaca

agagacaggctttcaccatgttgccagtcgtcttgaactcctgggctcaagcaatcc
20161 -----+-----+-----+-----+-----+-----+ 20220
tctctgtccgaaagtgttacaacgggtcagacgagaacttgaggacccgagttcgtagg

acctgccttgccctcccaaagtgtgagatcttatttgaaatctttcaacttttttgata
20221 -----+-----+-----+-----+-----+-----+ 20280
tggaacgaacggaggggtttcacgactctagaataaactttagaaagttgaaaaaactat

```

Figure 1 – page 28

```

taggcattacttgaaatctttctacttttttgatataggcatttattgctataaactttc
20281 -----+-----+-----+-----+-----+-----+ 20340
atccgtaatgaacttttagaaagatgaaaaactatatccgtaaataacgatatttgaaag

ctcttagtgctgcttctgctgtatcccatagatttttgcattgttatttccattttcat
20341 -----+-----+-----+-----+-----+-----+ 20400
gagaatcacgacgaagacgacatagggtatctaaaaacgtacaacataaaggtaaaagta

ctgtttcaagatatatttaaatTTTTTctcctaatttcttcatggaccattggctattcag
20401 -----+-----+-----+-----+-----+-----+ 20460
gacaaagttctataaaatttaaaaaggagattaaagaagtacctgggtaaccgataagtc

gagcatgttgtttaatttccatgtgtttgtgtattttccaaggttcttgttattgatttc
20461 -----+-----+-----+-----+-----+-----+ 20520
ctcgtacaacaaattaaagggtacacaaacacataaaagggtccaagaacaataactaaag

taattttattccatagtggtgagaaagatacttggttatgatgtctacttttctgaatttg
20521 -----+-----+-----+-----+-----+-----+ 20580
attaaaataagggtatcaccactctttctatgaacaatactacagatgaaaagacttaaac

ttaagacttgttttgtggcctaagatatagtctatgctggagaatgttccatgtgctatt
20581 -----+-----+-----+-----+-----+-----+ 20640
aattctgaacaaaacaccggattctatatcagatacgacctcttacaagggtacacgataa

gagcagaatgtctattctgcagcagttgagtaaaatgctctgtgaatgtcagctaggcct
20641 -----+-----+-----+-----+-----+-----+ 20700
ctcgtcttacagataagacgtcgtcaactcattttacgagacacttacagtcgatccgga

at ttgagctagtatatagtttaatgtttctttattattttctgtctggatgatctgtttt
20701 -----+-----+-----+-----+-----+-----+ 20760
taaactcgatcatatatcaaattacaaagaaataataaaagacagacctactagacaaaa

actgagagtgaggtgtggtgttagagtcacctactactattgcattacagtatatctctt
20761 -----+-----+-----+-----+-----+-----+ 20820
tgactctcactccacaccacaatctcaggggatgatgataacgtaatgtcatatagagaa

cttttagatctattaatgtttgctttatatactttggagctccaatgttgagtgcaaaga
20821 -----+-----+-----+-----+-----+-----+ 20880
gaaaatctagataattacaaacgaaatatatgaaacctcgagggtacaactcacgtttct

tacttatatcttcttctgctgaattgacctctttatcattatatagtaaccttctttgcctc
20881 -----+-----+-----+-----+-----+-----+ 20940
atgaatatagaagaacgacttaactggggaaatagtaatatatcattggaagaaacggag

tttgacagccttgattcacagtctgttttatctgatgtaagtatagctactcctgttctt
20941 -----+-----+-----+-----+-----+-----+ 21000
aaactgtcggaaactaagtgtcagacaaaatagactacattcatatcgatgaggacaagaa

ttttggtttccagttgcttggaaatgtcttttttccacctttaaacttccagtatttttat
21001 -----+-----+-----+-----+-----+-----+ 21060
aaaaccaaagggtcaacgaaccttacagaaaaaagggtggggaattgaagggtcataaaaaata

```

Figure 1 – page 29

```

aagtaaagtaggtttcttgtaggcagcatataatttgggtcccatTTTTgtatccattcag
21061 -----+-----+-----+-----+-----+-----+ 21120
ttcatttcatccaaagaacatccgtcgtatattaaaccagggtaaaaacataggtaagtc

ccactctattcctTTTTTTTTgggggggggttcccaagttttattcaagaactcataccaaa
21121 -----+-----+-----+-----+-----+-----+ 21180
ggtgagataaggaaaaaaaaacccccccaagggttcaaaataagttcttgagtatggttt

tattccagataaaataaatttttatcttcaccttccctcttctTTTTccagggttaaatct
21181 -----+-----+-----+-----+-----+-----+ 21240
ataagggtctatttatttaaaaaatagaagtggaaggaggagaagaaaaagggtccaattaga

ggaattaacgtcattcataataaactctTTTTgctgttagcaactacacacaacaaatcac
21241 -----+-----+-----+-----+-----+-----+ 21300
ccttaattgcagtaagtattattgagaaaaacgacaatcgttgatgtgtgtgttttagtg

atagattattcttcaaataTTTTTgggtgagatatttcaaataccttttgaaaaaggta
21301 -----+-----+-----+-----+-----+-----+ 21360
tatctaataagaagtttataaaaaaccactctataaagtttatggaaaacctTTTTccat

cctcagaagtcacagtgatcttgctgttgctcctttcgatggttataatgctccaccaag
21361 -----+-----+-----+-----+-----+-----+ 21420
ggagtcttcagtgtcactagaacgacaacgaggaaagctaccaatattacgaggtggttc

attcccagcttttccattcactttaatcctctcttgcaaaaactgctcaaaattggcagc
21421 -----+-----+-----+-----+-----+-----+ 21480
taagggtcgaaaaggtaagtgaaattaggagagaacgtttttgacgagttttaaccgtcg

atctatgattccattttctacaagggtgggtacagtcgaagagtgaacatcataacctgctt
21481 -----+-----+-----+-----+-----+-----+ 21540
tagatactaaggtaaaagatgttccacccatgtcagttctcacttgtagtattggacgaa

ctTTTTTgctctctttgccacaagctTTTTcacagcactatgcctcttaattggagaa
21541 -----+-----+-----+-----+-----+-----+ 21600
gaaaaaacggagagaaaacggtgttcgaaaaagtgtcgtgatacggagaattaacctctt

ttgagtccatttacatttagtgttattattgatacataaagacttaacattTTTTtaaat
21601 -----+-----+-----+-----+-----+-----+ 21660
aactcaggtaaatgtaaatcacaataataactatgtatttctgaattgtaaaaaaattta

tgatacataattgatgtagctattttggggcggttcattgtgataatttaatacattcatat
21661 -----+-----+-----+-----+-----+-----+ 21720
actatgtattaactacatcgataaaaccccgcaagtacactattaattatgtaagtata

aatttgtaaagattaaattagtgtaattgggatacctatcaccttcaatatttgtctttt
21721 -----+-----+-----+-----+-----+-----+ 21780
ttaaacatttctaatttaatacacattaaccctatggatagtggaagttataaacagaaaa

cttttctTTTTTTTTctgtgagatggagttttgctTTTTTgcccaggctggagtgcaat
21781 -----+-----+-----+-----+-----+-----+ 21840
gaaaagaaaaaaaaaagacactctacctcaaaacgaaaaaacgggtccgacctcacgtta

```

Figure 1 – page 30

21841      ggcgcaatctcgggtcactgcaacctccacctcccgggttcaagcaattctcctgcctca      21900  
-----+-----+-----+-----+-----+-----+  
ccgcgttagagccgagtgacgttggaggtggagggcccaagttcggttaagaggacggagt

21901      gcctcccagtagctgggattacaggcatgcaccaccatgctcagctaattttgtatttt      21960  
-----+-----+-----+-----+-----+-----+  
cggaggggtcatcgaccctaattgtccgtacgtggtggtacgagtcgattaaaacataaaa

21961      tagtagagacggggttttaccatgttgggtcaggctggtctcgaactcctgacctcaggtg      22020  
-----+-----+-----+-----+-----+-----+  
atcatctctgccccaaaatggtacaaccagtcggaccagagcttgaggactggagtccac

22021      atccactcgccctggcctaccaaagtgtctgggattataggcatgagccaccacacctggc      22080  
-----+-----+-----+-----+-----+-----+  
taggtgagcgggaccggatggtttcacgaccctaatatccgtactcgggtggtgtggaccg

22081      cctgtcttttctttatgttggaaacattcaaattattctcttcttagctattttgaaatat      22140  
-----+-----+-----+-----+-----+-----+  
ggacagaaaagaaatacaacctttgtaagtttaataagagaagatcgataaaactttata

22141      acaatatattattgtaaactagtcactttactgatatatcaaacactaggtcttattttct      22200  
-----+-----+-----+-----+-----+-----+  
tgttatataataacatttgatcagtgaaatgactatatagtttgtgatccagaataaaga

22201      ttcacaaaccctatatatatatatatatatatatatatatttttttttttttttttttg      22260  
-----+-----+-----+-----+-----+-----+  
aagtagtttgggatatatatatatatatatatatatatataaaaaaaaaaaaaaaaaaac

22261      agacggagtctcgtctgtctcgtctgtctgcccaggctagagtgcagtgggcacaatctc      22320  
-----+-----+-----+-----+-----+-----+  
tctgcctcagagcgagacagagcgagacagcgggtccgatctcacgtcacctgtgtagag

22321      ggcccactgcaagctccgcctcccgggttcatgccattctcctgcctcagcgccccgagt      22380  
-----+-----+-----+-----+-----+-----+  
ccgggtgacgttcgagggcggagggcccaagtacggtaagaggacggagtcgcgggggtca

22381      agctgggactacaggtgcctgccaccatgcccggttaattttttgtatttttagtagaga      22440  
-----+-----+-----+-----+-----+-----+  
tcgaccctgatgtccacggacgggtggtacgggcccgaattaaaaaacataaaaatcatctct

22441      cgggggttttaccatgttagccaggatggtctcaatctcctgacctgtgatccaccacc      22500  
-----+-----+-----+-----+-----+-----+  
gccccaaaatggtacaatcggtcctaccagagtttagaggactggaacactaggtgggtgg

22501      tcggcctcccaaagtgtctgggattacaggcttgagccaccgtgcccgccaaaccctata      22560  
-----+-----+-----+-----+-----+-----+  
agccggaggggtttcacgaccctaattgtccgaactcgggtggcacgggcccgggttgggatat

22561      ttataaccattaatcaacttctctttatctccccattctgtaccctttctggcctttg      22620  
-----+-----+-----+-----+-----+-----+  
aaatattggttaattagttgaagagaaaatagagggggtaagacatgggaaagaccggaac

**Figure 1 – page 31**

22621	gtaactatcaatatactctctatctttaatgagttccacttttttttagcttccacatatca -----+-----+-----+-----+-----+-----+-----+ 22680 cattgatagttatatgagagatagaattactcaagggtgaaaaaaatcgaagggtgatagt
22681	gtgagaacatatgatatttgtctttctgtgtttgccttatttctcttaacatgacctgca -----+-----+-----+-----+-----+-----+-----+ 22740 cactcttgtatactataaacagaaagacacaaacggaataaagagaattgtactggacgt
22741	gttccatgcatcttgcgtgcaaatgacaggatttccttctgttttaaaatctgaatagtat -----+-----+-----+-----+-----+-----+-----+ 22800 caagggtacgtagaacgacggtttactgtcctaaaggaagacaaaatttttagacttatcata
22801	tccattgtgtatatatgccacgttttcctcatccattcatccattgctggatgcttaggt -----+-----+-----+-----+-----+-----+-----+ 22860 aggtaacacatatatacggtgcaaaaggagtaggtaagtaggtaacgacctacgaatcca
22861	tgattccatatcttgggtattgtgattaatgctgcagtcacattaggagtgcagatatt -----+-----+-----+-----+-----+-----+-----+ 22920 actaagggtatagaaccaataacactaattacgacgtcagttgtaatcctcacgtctataa
22921	tccttgacatactgatttcatttcattcccttccttcccttgctgtctgctgccttc -----+-----+-----+-----+-----+-----+-----+ 22980 agggactgtatgactaaagtaaagtaaggggaaggggaaggggacggacagacggacggaag
22981	cttccttccttccttccttccttcctttcttccttccttccttccttccttcctccacc -----+-----+-----+-----+-----+-----+-----+ 23040 gaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggtgg
23041	ccccccgccccttccagatggaatctggctctgtcgcccaggctggagtgcagtggcgca -----+-----+-----+-----+-----+-----+-----+ 23100 ggggggcggggaaagtctaccttagaccgagacagcgggtccgacctcacgtcaccgcgt
23101	atctcagctcactacaacctccgcctcctgggttcaagcaattcttctgcctcagcctcc -----+-----+-----+-----+-----+-----+-----+ 23160 tagagtcgagtgatggttgaggcgaggaccceaagttcgtttaagaagacggagtcggagg
23161	cgagtagctgggattacgggcatgtgccgccataccagctaatttttttgtatttttag -----+-----+-----+-----+-----+-----+-----+ 23220 gctcatcgaccctaatgcccgtagacggcggtatgggtcgattaaaaaaacataaaaatc
23221	tagaggcagggttttaccatattggccaggctgggtctcgaactcctgacctcatgatcca -----+-----+-----+-----+-----+-----+-----+ 23280 atctccgtcccaaaatggtataaccgggtccgaccagagcttgaggactggagtactaggt
23281	cctgcctcagcctcccaaagtgtctgggattacataggtgtgagccaccgtacacagccag -----+-----+-----+-----+-----+-----+-----+ 23340 ggacggagtcggaggggtttcacgaccctaattgtatccacactcggtggcatgtgtcggtc
23341	tttcattttcttttctttttttttttttttttttttgagacggagtcctcgctctgttgccaggc -----+-----+-----+-----+-----+-----+-----+ 23400 aaagtataaaagaaaagaaaaaactctgcctcagagcgagacaacgggtccg

Figure 1 – page 32

tggagtgctggagtgcagtggcacgatctcggctcactgcaagctccacctccccgggttc  
23401 -----+-----+-----+-----+-----+-----+ 23460  
acctcacgacctcacgtcacctgtctagagccgagtgcgttcgaggtggagggcccaag  
  
acaccattctcctgcctcagcctcccaagtagctgggacaacaggcgctgccactatgt  
23461 -----+-----+-----+-----+-----+-----+ 23520  
tgtggtaagaggacggagtcggaggggttcacgcacctgttgtccgcgacggtgataca  
  
ccggctaattttttgtatttttttagtagagatgggggtttcactgtgttagccaggatgg  
23521 -----+-----+-----+-----+-----+-----+ 23580  
ggccgattaaaaaacataaaaaaatcatctctaccccaaagtgcacacaatcggtcctacc  
  
tctcgatctcctgaccttgtgatcgcccacctcggcctcccagagtgcgtgggattacag  
23581 -----+-----+-----+-----+-----+-----+ 23640  
agagctagaggactggaacactagccgggtggagccggaggggtctcacgacctaatgtc  
  
gtgtgagccaccgcgcctggcccattttcttttagatatatacccaagtagggggattgct  
23641 -----+-----+-----+-----+-----+-----+ 23700  
cacactcgggtggcgcgaccgggtaaaagaaatctatatatgggttcaccccctaacga  
  
gggtcatatagtagttctatttttaattttttgaggaatctccatactgtttcccataat  
23701 -----+-----+-----+-----+-----+-----+ 23760  
cccagtatatcatcaagataaaaaattaaaaaactccttagaggtatgacaaagggtatta  
  
ggctgtactaattttaattccaccaacagtggtgtaaggattagtgctggtgaggatgtg  
23761 -----+-----+-----+-----+-----+-----+ 23820  
ccgacatgattaaatttaagggtggtgtcacacattcctaatacagaccactcctacac  
  
gagaaaacgatacttctgggcattttttcttctattgagactaaagttgcaactcttagt  
23821 -----+-----+-----+-----+-----+-----+ 23880  
ctcttttctgtatgaagaccgcgtaaaaaagaagataactctgatttcaacgttgagaatca  
  
atTTTTTTTTtatactacccttttaggaaggtgaaattgttgaagtggatgaagaaacagca  
23881 -----+-----+-----+-----+-----+-----+ 23940  
taaaaaaaaaatatgatgggaaatccttccactttaacaacttcacctacttctttgtcgt  
  
E G E I V E V D E E (I) A -  
  
gctatcttgaagaattcaagatttgctcaagattttctgatcagaccaattggagagaag  
23941 -----+-----+-----+-----+-----+-----+ 24000  
cgatagaacttcttaagttctaaacgagttctaaaagactagtctggttaacctctcttc  
  
A I L K N S R F A Q D F L I R P I G E K -  
  
ttgccaacatctggaggctgttctgctttggagttaaagggttagtttggtttcactacc  
24001 -----+-----+-----+-----+-----+-----+ 24060  
aacggttgtagacctccgacaagacgaaacctcaatttccaatcaaaccgaaagtgatgg  
  
L P T S G G C S A L E L K  
  
tgagagaactattttatttattttttgagatggagtcctctctctgtcaccagactg  
24061 -----+-----+-----+-----+-----+-----+ 24120  
actctcttgataaaataaataaaaaactctacctcagagagagacagtggggtctgac



Figure 1 – page 33

gagtgcagtggtgtgatcttggctcactgcaacctccgcctcctgggttcaagcaattct  
24121 -----+-----+-----+-----+-----+-----+ 24180  
ctcacgtcaccacactagaaccgagtgcgttggaggcggaggaccaagttcgттаага  
  
ccctgcctcagcctcccgattagctaagattacaggcaccaccaccacgcccggctaatt  
24181 -----+-----+-----+-----+-----+-----+ 24240  
gggacggagtcggagggttaattcgattctaatgtccgtgggtgggtggtgcgggcccatta  
  
ttttgtgttttttagtagagatgggggttcgccatggtggccaggctggtcttgaactcc  
24241 -----+-----+-----+-----+-----+-----+ 24300  
aaaacacaaaaaatcatctctaccccaaagcggtaacaaccggtccgaccagaacttgagg  
  
tgacctcaggttaaccacctgcctcagtcctcccaaagtgcgtgggattacaggcgtgagcc  
24301 -----+-----+-----+-----+-----+-----+ 24360  
actggagtcatttgggtggacggagtcagagggtttcacgaccctaattgtccgcactcgg  
  
actgtgcccgccagtatgcatgggtctcttgaggcgcacttctcttgctgggtcaaattgtt  
24361 -----+-----+-----+-----+-----+-----+ 24420  
tgacacgggcccgtcatatgacgtaccagagaactccgcgtgaagagaacgaccagtttaca  
  
gttagacggttatataaccagttaaacgccaccattttgcctcttaattgtgcatgcttgag  
24421 -----+-----+-----+-----+-----+-----+ 24480  
caatctgccaatatatggtcaatttgccgtggtaaaacggagaattacacgtacgaactc  
  
cccacttgcccaactcccgagatcttatcggaagctgctgatcaccagtttcagggtgtt  
24481 -----+-----+-----+-----+-----+-----+ 24540  
gggtgaacgggttgagggtctagaatagcccttcgacgactagtggtcaaagtcacaa  
  
tctgtttattgggagacttcctttccctgggtactgtctgtgactaattatgattttcgag  
24541 -----+-----+-----+-----+-----+-----+ 24600  
agacaaataaccctctgaaggaaagggaccatgacagacactgattaataactaaaagctc  
  
agacagttaacaaccacctgatcatcacctaattgatcgccctgacattcctgggtggagtcg  
24601 -----+-----+-----+-----+-----+-----+ 24660  
tctgtcaattgttgggtggactagtagtggtactagcggactgtaaggaccacctcagc  
  
gcgcgggggagccctctcctgccctgctcacgcctgactagctattatacctgctttaaca  
24661 -----+-----+-----+-----+-----+-----+ 24720  
cgcgccctcgggagaggacgggacgagtgccgactgatcgataatatggacgaaattgt  
  
agttctccaaaattcagagacctttcgtgagtattctgattttataataaaatagttatt  
24721 -----+-----+-----+-----+-----+-----+ 24780  
tcaagagggtttaagtctctggaaagcactcataagactaaaatattattttatcaataa  
  
tgcataagtttagtaagagtcctttctctcaaaacaggacaattggagacacttggttat  
24781 -----+-----+-----+-----+-----+-----+ 24840  
acgtattcaaatcattctcagaaaagagagttttgtcctgttaacctctgtgaaccaata  
  
tttaccaaagctttgactggaataacattttgtaggttaaagttccagcaaagccaacttga  
24841 -----+-----+-----+-----+-----+-----+ 24900  
aaatgggttcgaaactgaccttattgtaaacatccatttcaaggctcgtttcggttgaact

Figure 1 – page 34

```
aaagagcctatctggccaaactcttgctggacttcatgcaaatgatcaggcaaagttaa
24901 -----+-----+-----+-----+-----+-----+ 24960
tttctcggatagaccggtttgagaacgacctgaagtacgtttactagtccgtttcaaatt

taagcctaaaaatttttttgcacataaattggccttactataatttgtctttagtataaa
24961 -----+-----+-----+-----+-----+-----+ 25020
attcggatttttaataaaaacgtgtatttaaccggaatgatattaaacagaaatcatattt

aggaggagctgggtgcagaagttcacactcataatcccagcactttgggaggctgagaca
25021 -----+-----+-----+-----+-----+-----+ 25080
tcctcctcgacccacgtcttcaagtgtgagtattagggctcgtgaaaccctccgactctgt

ggcagatcacttgaggccaggagtttgacaccagcctgggtaacatgttgaaaccctgtc
25081 -----+-----+-----+-----+-----+-----+ 25140
ccgtctagtgaactccggtcctcaaactgtgggtcggaccattgtacaactttgggacag

tctacaaaaatacaaaaaaattatctgggtatgggtggatgctggttagttccagtta
25141 -----+-----+-----+-----+-----+-----+ 25200
agatgggtttttatgtttttttaatagaccataaccaccacgtacgaccatcaaggtcaat

ctcaagaggctgagatgggaggattgcttgagcccaggagggtggagggaatgagccaa
25201 -----+-----+-----+-----+-----+-----+ 25260
gagttctccgactctaccctcctaacgaactcgggtccctccacctccggttactcggtt

gactgcaccactgcactccagcctgggcaacagagtgagactctgtctcaaaaaaaaaa
25261 -----+-----+-----+-----+-----+-----+ 25320
ctgacgtgggtgacgtgaggtcggaccggtgtctcactctgagacagagtttttttttt

aaaaaaaaaaaaaaaaaagaagaaggctagagagagaaatggtttcaaaggaaaactataac
25321 -----+-----+-----+-----+-----+-----+ 25380
tttttttttttttttttttcttctccgatctctctctttaccaaagtttcttttgatattg

acttgttactagatttccagcctggacttttgtttttgagtgcataattgaatcattaatt
25381 -----+-----+-----+-----+-----+-----+ 25440
tgaacaatgatctaaaggtcggacctgaaaacaaaaactcacgtataacttagtaattaa

atctcttggttacaataaccctctaaagataaaccaggttataatttttcttcatgtttt
25441 -----+-----+-----+-----+-----+-----+ 25500
taaagaaccgatgttattgggagatttctatttgggtccaatattaaaaagaagtacaaaa

tagtttgtgccctaagtgaataggttccttattctgttctgacacacgaataactctttt
25501 -----+-----+-----+-----+-----+-----+ 25560
atcaaacacgggattcaccttatccaaggaataagacaagactgtgtgcttatgagaaaa

gactgtcatattattaatgttatttatagctccttgttttacttccaaagaaaccagaat
25561 -----+-----+-----+-----+-----+-----+ 25620
ctgacagtataataattacaataaatatcgaggaacaaaatgaagggttcttttggtctta

catgatatttctaagggttagagaatccccggttggaatcccactgggtcctaactctgcttt
25621 -----+-----+-----+-----+-----+-----+ 25680
gtactataagattccaatctcttagggggcacaaccttagggtgaccaggattagacgaaa
```

Figure 1 – page 35

```

tcactgcaaattccgtgctgctaaaattatataagcactcttctctaggcccaggacct
25681 -----+-----+-----+-----+-----+-----+ 25740
agtgacgtttaaggcacgacgattttaatatattcgtgagaagagatccgggtccctgga

atcacacaaaaggtaggtgtgtgagactgtaagggccagttttgagagaattatttcaga
25741 -----+-----+-----+-----+-----+-----+ 25800
tagtgtgttttccatccacacactctgacattcccgtcaaaactctcttaataaagtct

ctctccaaatcaaaaatgggcacacagatgcataaacagctggtaaaataagggactctg
25801 -----+-----+-----+-----+-----+-----+ 25860
gagagggttagtttttaccggtgtgtctacgtatttgtcgaccattttattccctgagac

cctcctgggttattatgtgtgtggcaccttttcatccatcccaatcataaagaatttctt
25861 -----+-----+-----+-----+-----+-----+ 25920
ggaggaccaataatacacacaccgtggaaaagtaggtagggttagtatttcttaagga

gcttctcgtagaatgaaaagaaaattattactgagaggatataaaggtagctcatgtcaa
25921 -----+-----+-----+-----+-----+-----+ 25980
cgaagagcatcttactttttcttttaataatgactctcctatatatttccatggagtacagtt

agcctcctagggtttaatactctgagttatgagatttatgcagataacatatatatttttt
25981 -----+-----+-----+-----+-----+-----+ 26040
tcggaggatccaaattatgagactcaatactctaataacgtctattgtatatataaaaaa

aaaatttttagaacaggccaggcacagtgggtcaagcctgtaatcctagcactttgggagg
26041 -----+-----+-----+-----+-----+-----+ 26100
ttttaaaatcttgtccggtccgtgtcaccgagttcggacattaggatcgtgaaaccctcc

ccaaggtgggcagattgcctgagctcaggagttcaagaccagcctgggcaacatgggtgac
26101 -----+-----+-----+-----+-----+-----+ 26160
ggttccaccctctaacggactcgagtcctcaagttctggtcggaccctgtgtaccactg

accccatctctactaaaatacaaaaaataaattagatgggcatgggtggcgtgcgcctgta
26161 -----+-----+-----+-----+-----+-----+ 26220
tggggtagagatgattttatgtttttttatttaattctaccgtagccacgcgcggacat

gtcccagctacttgggaggctgaggcaggagaattgcttgagcccgggaggcggaggttg
26221 -----+-----+-----+-----+-----+-----+ 26280
cagggtcgatgaaccctccgactccgtcctcttaacgaactcgggccctccgcctccaac

caatgagacgagattgagatggcgccactgcactccagcctggcaacagagtgagactct
26281 -----+-----+-----+-----+-----+-----+ 26340
gttactctgctctaactctaccgcggtgacgtgaggtcggaccgttgtctcactctgaga

gtctcaaaataaataaataaataaataaataaataaataaataaataaataatttttagaa
26341 -----+-----+-----+-----+-----+-----+ 26400
cagagttttatttatttatttatttatttatttatttatttatttatttatttataaatctt

caaattactgaaagaccacaaaaaaaaaactgtagcacacggaagtctctaaattcctt
26401 -----+-----+-----+-----+-----+-----+ 26460
gtttaatgactttctgggtgttttttttttttgacatcgtgttgccttcagagatttaagga

```

Figure 1 – page 36

tagcttaaaagggttttaacagtgccttatgttttgatatagctaattgctgtaagtctgtaa  
26461 -----+-----+-----+-----+-----+-----+ 26520  
atcgaattttccaaaattgtcacgaatacaaaacatatcgattaacgacattcagacatt  
  
ctaaaaccaagattacagtagcacaaatgcatagaagttaaagataagtcaattttttaac  
26521 -----+-----+-----+-----+-----+ 26580  
gattttgggttctaattgtcatcgtgttacgtatcttcaatttctattcagttaaaaaattg  
  
ctcacctttggctttttgtttgttggttttatattaagaaattttaagggtttattaat  
26581 -----+-----+-----+-----+-----+ 26640  
gagtggaaaccgaaaaacaacaaccgaaaatataattctttaaaattcccaaataatta  
  
gcctatccacatccattcccatctggcctagaactttcttttttttgggtgggggaggggg  
26641 -----+-----+-----+-----+-----+ 26700  
cggataggtgtaggtaagggttagaccggatcttgaaagaaaaaaaccaccccctcccc  
  
acggagtcttctctgtcaccagggtggggtgcagtggtgctgatctcatctcactgcaa  
26701 -----+-----+-----+-----+-----+ 26760  
tgcctcagaaggagacagtgggtccgaccccacgtcaccgcactagagtagagtgcgtt  
  
cctccgcctcacagggtcaagtgattctcctgcctcagcctcctgagtagctgtaattac  
26761 -----+-----+-----+-----+-----+ 26820  
ggaggcggagtggtccaagttcactaagaggacggagtcggaggactcatcgacattaatg  
  
aggcatgtgccaccatgcctggctaattttttttttttttttttttttttttttccgagatg  
26821 -----+-----+-----+-----+-----+ 26880  
tccgtacacggtggtacggaccgattaaaaaaaagaaaaaaaaaaaaaaggctctac  
  
gagtcttgctctgttgcccaggctggagtgagtggtgcgacctcggtcactgcaacct  
26881 -----+-----+-----+-----+-----+ 26940  
ctcagaacgagacaacgggtccgacctcacgtcaccacgctggagccgagtgacgttggga  
  
ctgcctcccaagttcaagcgattcttctgcctcagcctccagagtagatgggactacagg  
26941 -----+-----+-----+-----+-----+ 27000  
gacggagggttcaagttcgctaagaagacggagtcggaggtctcatctaccctgatgtcc  
  
tgctgtgccaccatgcctggctaatttttttttttttttttttttagtagagatgggggttcat  
27001 -----+-----+-----+-----+-----+ 27060  
acgcacggtggtacggaccgattaaaaataaaaataaaaaaatcatctctaccccaaagta  
  
catattggccaggctggtctcgaactccttacctcatgatccaccaccttggcctccca  
27061 -----+-----+-----+-----+-----+ 27120  
gtataaccggtccgaccagagcttgaggaatggagtactaggtgggtggaaccggagggt  
  
aagtgtgggattataggcatgagccactgtgccagccctaattcgtattttttagtaga  
27121 -----+-----+-----+-----+-----+ 27180  
ttcacgaccctaatatccgtactcgggtgacacgggtcgggattaagcataaaaaatcatct  
  
gacagggtttcaccatgttgggtcaggctggtctcaaaactgctgatcttaggtgaccaacc  
27181 -----+-----+-----+-----+-----+ 27240  
ctgtcccaaagtgggtacaaccagtccgaccagagtttgacgactagaatccactgggttg

Figure 1 – page 37

```

tgtctcggcctcccaaagtgtgagattacaggggtgaaccaccatgcctgggtctggcct
27241 -----+-----+-----+-----+-----+-----+ 27300
acagagccggaggggtttcacgactctaattgtcccccacttggtggtacggaccagaccgga

agaactttcaaattcgctatgtgtcttttggctctaagcccccttgaccataggggtccca
27301 -----+-----+-----+-----+-----+-----+ 27360
tcttgaaagtttaagcgatacacagaaaaccgagattcggggaactggtatccccagggt

ccaaggcacaagatggaccaggggaaggcagctgtgccaccccagcaacacagtgagata
27361 -----+-----+-----+-----+-----+-----+ 27420
ggttccgtgttctacctgggtcccttccgtcgacacgggtggggtcgttgtgtcactctat

aaataaaaagtttggtgaccattgatgttgccctctgacaaatctaggccagaatgcggaga
27421 -----+-----+-----+-----+-----+-----+ 27480
tttatttttcaaaccactggtaactacaacggagactgtttagatccggtctttacgcctct

aagtaaatcaaaaaataaaattctaggccggggcgcggtgggtcacacctgtaatcccagca
27481 -----+-----+-----+-----+-----+-----+ 27540
ttcatttagtttttatttttaagatccggcccgcgccaccgagtgtggacattaggggtcgt

ctttgggaggccgaggcgggtggatcacaagggtcaggagttcgagaccagcctggccaac
27541 -----+-----+-----+-----+-----+-----+ 27600
gaaaccctccggctccgcccacctagtgttccagtcctcaagctctggtcggaccgggttg

atagtgaacccccgtctctactaaaaataaaaaatcagccaggcgtgggggcaggcacct
27601 -----+-----+-----+-----+-----+-----+ 27660
tatcactttggggcagagatgattttttatttttttagtcggtccgcacccccgtccgtgga

gtagtcccagctacttgggaggctgaggcaggagaattccttgaacctgggagggtggagg
27661 -----+-----+-----+-----+-----+-----+ 27720
catcagggtcgatgaaccctccgactccgtcctcttaaggaacttggaacctccacctcc

ttgcagtgaaccgagatcatgccactgcactctaacctgggcgacagagcgagactccat
27721 -----+-----+-----+-----+-----+-----+ 27780
aacgtcactcggctctagtacggtgacgtgagattggaccgcgtgtctcgctctgaggtat

ctcaaaaaataaaaaaaaaataaaaaataaaaaataaaaaataaaattataaacctcaac
27781 -----+-----+-----+-----+-----+-----+ 27840
gagttttttattttttttttattttttttattttttttatttttttttaattttgggagttg

catctgaacggaccctcctgtcgggcaaaggcattgcaaagttatcctaaaaaactagt
27841 -----+-----+-----+-----+-----+-----+ 27900
gtagacttgccctggggaggacagcccgtttccgtaacgtttcaataggattttttgatca

tcaggtcacgaagggaaggagaagtttggacatgcctcattattccctcctcccttttgg
27901 -----+-----+-----+-----+-----+-----+ 27960
agtccagtgcctcccttccctcttcaaacctgtacggagtaataaggaggaggaggaaaacc

aattcagacactgctgaccagcattaccattaaaacagatcttaagactgatagaacaga
27961 -----+-----+-----+-----+-----+-----+ 28020
ttaagtctgtgacgactgggtcgtaatggtaattttgtctagaattctgactatcttgtct

```

Figure 1 – page 38

```
ctcttttaaatctggaagaacatttacaatctattctctctgtagcctgctgcctagag
28021 -----+-----+-----+-----+-----+-----+ 28080
gagaaatttagaccattctttgtaaatgtagataagagagacatcggacgacggatctc

gcttcatctgcatgataaaaccttggctctccacaatctcttatcataacctagacactcc
28081 -----+-----+-----+-----+-----+-----+ 28140
cgaagtagacgtactattttgaaccagaggtgtagagaatagtattggatctgtgagg

cttctattgatcccaggctcttggattataactcaaccaattgccaatcacaaaatcttt
28141 -----+-----+-----+-----+-----+-----+ 28200
gaagataactaggggtccagaaacctaattaggttggttaacgggttagtgtttagaaa

gaatctgcctgtgacctggaaatccccacttccagttgtcccacgtttctggctgaacc
28201 -----+-----+-----+-----+-----+-----+ 28260
cttagacggacactggacctttaggggtgaaggtcaacaggggtgcaaagaccagacttgg

aatgtacatattatatgtattgattgatgtcttatgtctctctctaaaatgtataaaacaa
28261 -----+-----+-----+-----+-----+-----+ 28320
ttacatgtataataacataactaactacagaatacagagagattttacatatatttggtt

gttataggggtgaccactttgggcacatgtttgcagatctcctgagggctgtgtcacaggc
28321 -----+-----+-----+-----+-----+-----+ 28380
caatatcccactggtgaaaccgtgtacaaacgtctagaggactccgacacagtggtccg

cattggctcacttatttggctcagaataaatctttttaagtatttttagagtttgacccttt
28381 -----+-----+-----+-----+-----+-----+ 28440
gtaaccagtgaataaaccgagtcttatttagaaaaattcataaaatctcaaactgggaaa

ttgttgacaatgtttaacatcctacagttatgacaccctaatttgaatttatacagctta
28441 -----+-----+-----+-----+-----+-----+ 28500
aacaactgttacaaattgtaggatgtcaatactgtgggattaaacttaaatatgtcgaat

acttcaataacataactaaaattctgctcctttaaagcttggttctcaactatttttagttct
28501 -----+-----+-----+-----+-----+-----+ 28560
tgaagttattgtatgattttaagacgaggaaatttcgaacaagagttgataaaatcaaga

tttttttttttttccattgacagagtttctactctatcaccagggctggagtgcagtggca
28561 -----+-----+-----+-----+-----+-----+ 28620
aaaaaaaaaaaaaggttaactgtctcaaagttagatagtggttccgacctcacgtcacgtt

cgatcttggctcactgcagcctctgcctcctgggttcaagtgattctcctgccccagcct
28621 -----+-----+-----+-----+-----+-----+ 28680
gctagaaccgagtgacgtcggagacggaggaccaagtctactaagaggacgggggtcgga

cacaagtagctgggattacaggtgcgccagccaccatgcctggctaattttttgtatttt
28681 -----+-----+-----+-----+-----+-----+ 28740
gtgttcatcgaccctaattgtccacgcggtcggtggtacggaccgattaaaaaacataaaa

tagtagaggcggggtctcatcatgttggccagcctggtctcgaactcctgacatcagatg
28741 -----+-----+-----+-----+-----+-----+ 28800
atcatctccgccccagagtagtacaaccgggtcggaaccagagcttgaggactgtagtctac
```

Figure 1 – page 39

atccaccagcctcggcctcccaaagtgctgggattacaggtgtgaactaccacgcccggg  
28801 -----+-----+-----+-----+-----+ 28860  
taggtggtcggagccggagggtttcacgaccctaattgtccacacttgatggtgcggggccc  
  
tctttctagttcttgatatcacaaaattatgtctttattcattttgtgccccaaaacgt  
28861 -----+-----+-----+-----+-----+ 28920  
agaaagatcaagaactatagtgttttaatacagaaataagtaaaacacgggggttttgca  
  
aaactaataattattttaaatgcattggtctctttaaatacatgtggaaaacaaaaagtaga  
28921 -----+-----+-----+-----+-----+ 28980  
tttgattattaataaaatttacgtaaccagagaatttagtacaccttttgtttttcatct  
  
gttacaaccattgtttacaataatactagcttttgccgggtgtggtggcttacgccaccag  
28981 -----+-----+-----+-----+-----+ 29040  
caatgtttggttaacaatgttattatgatcgaaacggcccacaccaccgaatgcggtggtc  
  
gtgatccaccacctaaggttgcccagcctgggcaacaagagcacaactccatctcaaaaa  
29041 -----+-----+-----+-----+-----+ 29100  
cactaggtgggtggatccaacgggtcggaccctgtgttctcgtgttgaggtagagttttt  
  
aacaaaaacaaataaaacaaaaaaccccaataataaccagcttttttttttttttgagacag  
29101 -----+-----+-----+-----+-----+ 29160  
ttgtttttgtttattttgttttttgggggttattatggtcgaaaaaaaaaaaaaactctgtc  
  
agcttcgctcttgttgcccaggctagagtgaatggtgcggtcttggtcaccgcaacct  
29161 -----+-----+-----+-----+-----+ 29220  
tcgaagcgagaacaacgggtccgatctcacgttaccacgcgagaaccgagtggtggtgga  
  
ccgcctcctgggttcaagcgggtctcctgcctcagcttcccaagtagctgggattacagg  
29221 -----+-----+-----+-----+-----+ 29280  
ggcggaggaccgaagtgcgcaagaggacggagtcgaagggttcacgaccctaattgtcc  
  
tgcgccaccatcacagccggctaattttttgtatttttagtagagacgggggttttaccatgt  
29281 -----+-----+-----+-----+-----+ 29340  
acgcgtggtagtgtcggccgattaaaaacataaaaaatcatctctgccccaaaatggtaca  
  
tggtcaagctggtctcaaactcctgacctcaggtaatccacctgccttggcctcccaaag  
29341 -----+-----+-----+-----+-----+ 29400  
accagttcgaccagagtttgaggactggagtcattaggtggacggaaccggaggggttc  
  
tgctgggattacaggcatgagccaccgtgcccggccaatcccagcactttgggagggtga  
29401 -----+-----+-----+-----+-----+ 29460  
acgaccctaattgtccgtactcgggtggcacgggcccgggttagggtcgtgaaaccctccgact  
  
ggctggcagaccacttgaggtcaggaggtcaagaccagcctggccaacatgctgaaaccg  
29461 -----+-----+-----+-----+-----+ 29520  
ccgaccgtctggtgaactccagtcctccagttctggtcggaccgggtgtacgactttggc  
  
tgtctgtactaaaaatacaaaaattagctgggcacgggtggcaaatgcctataatcccagt  
29521 -----+-----+-----+-----+-----+ 29580  
acagacatgatttttatgtttttaatcgaccctgcccaccgtttacggatattaggggtca

Figure 1 – page 40

tacttggggggctgaggcaggaggatcgttttgagcccggaatgtggaggctgtagtga  
29581 -----+-----+-----+-----+-----+-----+ 29640  
atgaaccccccgactccgtcctcctagcaaaactcgggccctacacctccgacatcactc  
ccgtgatcacaaactgtaccccagcctgggcgacagagcaagaccctgcctcaaaaaa  
29641 -----+-----+-----+-----+-----+-----+ 29700  
ggcactagtgtgtgacatggggtcggaccgcgtgtctcgttctgggacggagtttttt  
aaaaaaaaaagcacaaagctttttgagaaatcactttcaaaaatggtacattttagtt  
29701 -----+-----+-----+-----+-----+-----+ 29760  
tttttttttttcgtgtttcgaaaaactcttttagtgaaagtttttaccatgtaaacaatcaa  
ggggaaggttaatcgaacctaaaaatataagaatcctggaccccaaacctggagccagta  
29761 -----+-----+-----+-----+-----+-----+ 29820  
ccccctccaattagcttggattttatattcttaggacctgggggttttgacctcggtcat  
ttaccagcatgaatctaaccaagctcagtatacaagccacctgtagagctaaagagtga  
29821 -----+-----+-----+-----+-----+-----+ 29880  
aatggctcgtacttagattgggttcgagtcatatgttcggtggacatctcgatttctcact  
tttactaggccgggcacggtggcttacgcctgtaatcccagcactttgggagccgaggcg  
29881 -----+-----+-----+-----+-----+-----+ 29940  
aaatgatccggcccggtgccaccgaatgcggacattagggctcgtgaaaccctcgggtccgc  
ggtggatcacgaggtcaggagttcaagaccagcctggccaagatggtgaaaccccgctctc  
29941 -----+-----+-----+-----+-----+-----+ 30000  
ccacctagtgtctccagtcctcaagttctgggtcggaccggttctaccactttggggcagag  
tactaaaaatacaaaaaaatttagccgggcgtggtggcatgcgcctgtaatcccagctac  
30001 -----+-----+-----+-----+-----+-----+ 30060  
atgatttttatgttttttttaatecgcccgccaccacgtacgcggacattagggctcgatg  
tcagagggtgaggcagagaattgcttaaacctggaggggagggttcgagtgaaccca  
30061 -----+-----+-----+-----+-----+-----+ 30120  
aggctcctcgactccgtctcttaacgaatttgacctccccgcctccaacgtcactcggtc  
gatcgcgccactgcactccagctggggtgacagagtgaactccatctcaaaaaaaaaa  
30121 -----+-----+-----+-----+-----+-----+ 30180  
ctagcgcggtgacgtgaggtcgaccccaactgtctcactctgaggtagagtttttttttt  
aaaagagtgatttactttctttgctttattaaattcttcagcactctgctattctgactc  
30181 -----+-----+-----+-----+-----+-----+ 30240  
ttttctcactaaatgaaagaaacgaataatttaagaagtcgtgagacgataagactgag  
ttctgttgttcgaagaaggatgatactttggaaagtagacagatttggttttgagtattc  
30241 -----+-----+-----+-----+-----+-----+ 30300  
aagacaacaagcttcttccactatgaaacctttcatctgtctaaaccgaaaactcataag  
aatccattaaacattttcaaaaatattgtcactgatattttgaaactcctgagagttcattg  
30301 -----+-----+-----+-----+-----+-----+ 30360  
ttaggtaatttgtaaagtttttatcacagtgaactataaaactttgaggactctcaagtaac



Figure 1 – page 41

ataaggaaagctgctggtgagaatcaatattttatttttaaaggcttttatcattctaatt 30361  
-----+-----+-----+-----+-----+-----+ 30420  
tattcctttcgacgaccactcttagttataaataaaattttccgaaaatagtaagattaa  
cttctaaaacctggttttctaaatactgattataaaagctatcagaaggcgtggtggctc 30421  
-----+-----+-----+-----+-----+-----+ 30480  
gaagattttggaccaaaggatttatgactaatattttcगतatgtcttcgcaccaccgag  
acgcctgtaatcccagcactttggggaggccgaggcgggtggatcacgaggtcaggagat 30481  
-----+-----+-----+-----+-----+-----+ 30540  
tgcggaacattagggctgtgaaacccctccggctccgccacctagtgtccagtcctcta  
cgagaccatcctggctaacacggtgaaaccccgctctactaaaaatacaaaaaattagc 30541  
-----+-----+-----+-----+-----+-----+ 30600  
gctctggttaggaccgattgtgccactttggggcagagatgatttttatgttttttaacg  
cgggcgtggtggcggtgctgtagtcccagctactcgggaggctgaggcaggagaatgg 30601  
-----+-----+-----+-----+-----+-----+ 30660  
gcccgaccaccgcccacggacatcagggtcgatgagccctccgactccgtcctcttacc  
cgtgaacccgggaggcggagcttgacgtgagcagagatcatgccactgcactccagcctg 30661  
-----+-----+-----+-----+-----+-----+ 30720  
gcacttggggccctccgcctcgaacgtcactcgtctctagtacgggtgacgtgaggtcggac  
ggcgacagagttaggctccgtctcaagaaaaaaaaaaatgctatcagaagataatggtt 30721  
-----+-----+-----+-----+-----+-----+ 30780  
ccgctgtctcactccgaggcagagttcttttttttttttacगतatgtcttctattacaa  
acaagtaaagagggtctttcctcgagctacagtattttcagtgtactctggctttttttt 30781  
-----+-----+-----+-----+-----+-----+ 30840  
tgttcatttctcccagaaaggagctcgatgtcataaaagtccacatgagaccgaaaaaaa  
tttcttttgagacagagtctcgctctgtcaccagggtggagtgcagtggcacgatcttg 30841  
-----+-----+-----+-----+-----+-----+ 30900  
aaaggaaactctgtctcagagcgagacagtgggtccgacctcacgtcacctgtctagaac  
gcttactcctccgcctcctgggttcaaacaattctcctgcctcagcttcccagtagctg 30901  
-----+-----+-----+-----+-----+-----+ 30960  
cgaatgaggaggcggaggaccaagtttggttaaggaggcggagtccaagggctcatcgac  
ggactacaggcacacgccaccacgcccggctcattttttgtattttaatagagacggggt 30961  
-----+-----+-----+-----+-----+-----+ 31020  
cctgatgtccgtgtgcggtggtgcgggcccagtaaaaaacataaaattatctctgcccc  
ttcaccgggttgcccaggctggtggtgaactcctgagctcaggcaatccgcccgcctcgg 31021  
-----+-----+-----+-----+-----+-----+ 31080  
aagtggcccaacgggtccgaccaccacttgaggactcgagtcggttaggcgggaggagcc  
cctcccaaagtgtgggatgacaggtgtgagccactgtgccagccactctggctatttt 31081  
-----+-----+-----+-----+-----+-----+ 31140  
ggaggggtttcacgacctactgtccacactcggtgacacgggtcggtgagaccgataaaa

Figure 1 – page 42

```

31141 ttttaaaaaaggaggttaaataagagtttgcttctgcagatgaccattttctttctgcgtagc 31200
-----+-----+-----+-----+-----+-----+
aaaattttttcctcaatttactcaaacgaagacgtctactggtaaaagaaagacgcacgc

31201 tgtccttggttctccctcccagtggtgcgtgcaacacatgtacaggaggttcttgaccttag 31260
-----+-----+-----+-----+-----+-----+
acaggaacaagaggagggtcacacgcacggttggtgtacatgtcctccaagaactggaatc

31261 atataaattgtaaaattccacatatttgaactggtttatcccaacataagggtctcctttc 31320
-----+-----+-----+-----+-----+-----+
tatatttaacatttttaagggtgtataaacttgaccaaataagggttgattccagaggaaag

31321 tgctttattttcagcctgcagatgtgccaatgtcttttaggtcagtttcaagtttttgaaat 31380
-----+-----+-----+-----+-----+-----+
acgaaataaagtgcggacgtctacacggttacagaaatccagtcaaagttcaaaaacttta

31381 gggaataagtgcactgaaggaagattttaataaatgaaacagttgtgtgacctaggaat 31440
-----+-----+-----+-----+-----+-----+
cccttattcactgtgacttccttctaaaattatttactttgtcaacacactggatcctta

31441 ataaccttgctccttagggaaggacattcttatcttttttttttttttcttaacggaag 31500
-----+-----+-----+-----+-----+-----+
tattggaacacgagaatcccttctgtgaagaatagaaaaaaaaaaaaagaattgccttc

31501 acctttatgataaacgctggagtacagacagtacacgcagctggcatgcagggtattgca 31560
-----+-----+-----+-----+-----+-----+
tggaataactatttgcgacctcatgtctgtcatgtgcgtcgacctacgtcccataacgt

31561 tatacttaacatcttgagagtccttctgctttttcttcatcttctttttaatcctgatat 31620
-----+-----+-----+-----+-----+-----+
atatgaattgtagaactctcaggaagacgaaaaagaagtagaagaaaaattaggactata

31621 gcaaaatgtattttgccattaaaacaattgtactattaaaacactgcagcatctggctgg 31680
-----+-----+-----+-----+-----+-----+
cgttttacataaaaacggttaattttgttaacatgataattttgtgacgtcgtagaccgacc

31681 gcgtgggtggctcacacctgtaatcccagcattttgggaggctgaggcgggtggatcactt 31740
-----+-----+-----+-----+-----+-----+
cgcaccaccgagtggtggacattagggtcgtaaaacctccgactccgcccacctagtgaa

31741 gaggtcaggagttcaacagcagcctgtctaacatggtgaaacccctctctactaaaaat 31800
-----+-----+-----+-----+-----+-----+
ctccagtcctcaagttgtcgtcggacagattgtaccactttgggggagagatgattttta

31801 acaaaaattagctgggtgtggtggcgggtgctgtaatcccagctttttggaagactgag 31860
-----+-----+-----+-----+-----+-----+
tgtttttaatcgaccacaccacgcccacggacattagggtcgaaaaaccttctgactc

31861 gcaggaggatcacctgggaggcagaggttgacgtgagccaagatcggtccactgcactcc 31920
-----+-----+-----+-----+-----+-----+
cgtcctcctagtggaccctccgtctccaacgtcactcggttctagcacgggtgacgtgagg

```

**Figure 1 – page 43**

31921	agcctcggcgcacaaaggagagactccctctcaaaaaacaaaaacacacactgcagc -----+-----+-----+-----+-----+-----+-----+ 31980 tcggagccgctgtttccctctgagggagagttttgttttttgttgttttgtgacgtcg
31981	atctgaaatgatgcaaacaggattagggctatggactgtcttaatagtaatggtagtaat -----+-----+-----+-----+-----+-----+ 32040 tagactttactacgtttgtcctaatacccgatacctgacagaattatcattaccatcatta
32041	agcattaacaaccatagcagtaatatagaggaattaacttttattgaatagttaatatgt -----+-----+-----+-----+-----+-----+ 32100 tcgtaattgttggatatcgtcattatatctccttaattgaaaataacttatcaattataca
32101	ttaaggcacccctgtcatttagtccctcacaatcacccctattatcttcatttgacagatgg -----+-----+-----+-----+-----+-----+ 32160 aattccgtgggacagtaaatcaggagtggttagtggggataatagaagtaaaactgtctacc
32161	agagactgaggtctgaaagattcatttacaaatccaaagtcatacagctagaaagtgggt -----+-----+-----+-----+-----+-----+ 32220 tctctgactccgagactttctaagtaaatgtttagggtttcagtatgtcgatctttcacca
32221	gaatttgaccccacatctgattctggagctggcactctaaaccagtggtgctgctccatct -----+-----+-----+-----+-----+-----+ 32280 cttaaacgtgggtgtagactaagacctcgaccgtgagatttgggtcacacgacgaggtaga
32281	ctccatagttgtacttctcatagaatcacaggatgttgggtgcaggaaaggactgcttata -----+-----+-----+-----+-----+-----+ 32340 gaggtatcaacatgaagagtatcttagtgctctacaaccacgtcctttcctgacgaatat
32341	tctgggtacccccacctttcatttccttcaagtcttgagatcttttgaactagaagcatg -----+-----+-----+-----+-----+-----+ 32400 agacccatggggtggaaagtaaaggaagttcagaactctagaaaaacttgatcttcgtac
32401	catttagaagtgatattgatatcaccatctcctggttggtagatagatcattgagtgga -----+-----+-----+-----+-----+-----+ 32460 gtaaatcttcactataactatagtggtagaggacaaccatctatctagtaactcacctt
32461	gaagaggggttcaagggttctcccacctcagcctcatagtagccaccacgcccactaat -----+-----+-----+-----+-----+-----+ 32520 cttctcccaagttccctaagaggggtggagtcgggagtatcatcggtggtgcggggtgatta
32521	ttttatattttcagtagagacgggggttcatcatgttggccagggtggtctcgaactcct -----+-----+-----+-----+-----+-----+ 32580 aaaatataaaaagtcattctctgccccaaagtagtacaaccgggtccgaccagagcttgagga
32581	gacctcaggtgatccactgccttggcctcccagagtgctgggattactcccagagtacat -----+-----+-----+-----+-----+-----+ 32640 ctggagtccactaggtgacggaaccggaggggtctcacgacctaatgaggggtctcatgta
32641	gagccaccgcaccaggccagggcaaaccctttcaagcaggagttccagtatactgagaga -----+-----+-----+-----+-----+-----+ 32700 ctcggtggcgtggtccggtcccgtttgggaaagttcgctcctcaagggtcatatgactctct

**Figure 1 – page 44**

	tggaaatgcaattgatgtgaagtccttagcagttagcaaccagcagagctggccttctttcca	
32701	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	32760
	acctttacgttaactacacttcaggatcgctcatcggttggtcgtctcgaccggaagaaggt	
	ggcttgagatcctctgccagatgctcatcttaccagatgcaggcagacctcttcatttc	
32761	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	32820
	cpgaacctctaggagacgggtctacgagtagaatgggtctacgtccgtctggagaagtaaag	
	agaaaggtagacactgagggacagagagaccaaggccagcaggaagtcagtcacttttagt	
32821	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	32880
	tctttccatctgtgactccctgtctctctggttcgggtcgtccttcagtcagtgaaatca	
	aaagggtcaccagctctatcagtttcatgaatgtagagtctgtgcctgccttgtacccc	
32881	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	32940
	tttcccagggtggtcagatagtc aaagta cttacatctcagacacggacggaacatgtggg	
	ctctatttgca gtgaccagaataagtagtaggactgtaaat tttatgtttataatgaattca	
32941	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33000
	gagataaacgtcactgggtcttattcatcatcctgacattttaataacaatattacttaagt	
	ttaccattattttaaagtggcatgttcatgcttttttttttttttttttgagatggagtcctcg	
33001	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33060
	a atggtaataaaatttcaccgtacaagtacgaaaaaaaaaaaaaaaactctacctcagagc	
	ctctgtcacccagggttgagtgca gtcagtggtgtgatctcagctcactgcaacctccacctcc	
33061	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33120
	gagacagtggggtccaacctcacgtcaccacactagagtcgagtgacgttgagggtggagg	
	taggttca agtgattctcttgccctcagcctccccagtagctgagactacagacgtgccac	
33121	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33180
	atccaagttcactaagagaacggagtcggaggggtcatcgactctgatgtctgcacgggtg	
	cacaccagctaattttttgtatttttagtagagatgggattttgcca tattgccagggc	
33181	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33240
	gtgtgggtcgattaaaaaacataaaaatcatctctaccctaaaacgggtataacgggtccg	
	ttgtctcaaactcctggcctcaggtgatccattggcctcggcctctcaaagtgctgggat	
33241	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33300
	aacagagtttgaggaccggagtc cactaggt aaccggagccggagagtttcacgacctta	
	tacaggcgtgagccaccgtgccagaccctgtgctcttgatttcctatctttgtacttgg	
33301	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33360
	atgtccgcactcgggtggcacgggtctgggacacgagaactaaaggatagaaacatgaacc	
	cttttctctggccccactgg tactattgttagaggtatctcattttggaggtgaaaggagg	
33361	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33420
	gaaaagagaccggggtgacctgataacaatctccatagagtaaacctccactttcctcc	
	ggaaataaatacagcagtccttgctcttttaataaatacagcagtccttatgttactctact	
33421	- - - - - + - - - - - + - - - - - + - - - - - + - - - - - + - - - - - +	33480
	ccttttattttatqtcqtcaqaacagaaaaattttttatqtcqtcaqaataacaatgaatga	

Figure 1 – page 45

```

ctgagatctgtctggccattgttggcaatttcacatctgagcatcagcaattgctagtgaca
33481 -----+-----+-----+-----+-----+-----+ 33540
gactctagacagaccggttaacaaccgttaaagtagactcgtagtcgttaacgatcactgt

gccctacatctgggactcactttcctgtttggtataaatgtttctggagattagaataag
33541 -----+-----+-----+-----+-----+-----+ 33600
cgggatgtagaccctgagtgaaggacaaaccatatttacaagacctctaattcttattc

ggaagagaagtcgtttttagcatttccgtatctcagttccaaagagggtttaaaaggcacgt
33601 -----+-----+-----+-----+-----+-----+ 33660
ccttctcttcagcaaaatcgtaaaggcatagagtcaaggtttctccaaattttccgtgca
      I10 (-282)
gcaaatgacaaacccacaaaacaaaatcaactgagcaaaaatcaatgctctgcccgaagag
33661 -----+-----+-----+-----+-----+-----+ 33720
cgtttactgttgggggtgttttgttttagttgactcgtttttagttacgagacgggttctc
      I10 (-189)
ggaccatctttaagaagctttaagtgaagtttaccttgaaagttgtaattagaagcttca
33721 -----+-----+-----+-----+-----+-----+ 33780
cctggtagaaattcttcgaaattcacttcaaattggaactttcaacattaatcttcgaagt

ggaagcaagtgcctttatggcagaatgactgatgttactcccaggatctcatggaattgt
33781 -----+-----+-----+-----+-----+-----+ 33840
ccttcgttcacggaataaccgtcttactgactacaatgaggggtcctagagtaccttaaca
      I10 (-94)
aaaattttatctctgttctgtgtaagtcaacctaaatcaaacagaaatattagtgtttgg
33841 -----+-----+-----+-----+-----+-----+ 33900
ttttaaaatagagacaagacacattcagttggatttagtttgtctttataatcacaacc

gtacatcaaaacacctttaacttgtcctttcattttggtttgccttttgacaggatataa
33901 -----+-----+-----+-----+-----+-----+ 33960
catgtagttttgtggaaattgaacaggaaagtaaaaccaaacggaaaactgtcctatatt

                                     D I I -

tcacagatccatttaagcttgacagaagagcttgacagtatgaagtccagatgtgtccctg
33961 -----+-----+-----+-----+-----+-----+ 34020
agtgtctaggtaaattcgaacgtcttctcagactgtcatacttcaggtctacacagggac

      T D P F K L A E E S D S M K S R C V P D -

atgctgctggaggctgctgtggcacaagaaaagctgctaaatctatagccaaccagggg
34021 -----+-----+-----+-----+-----+-----+ 34080
tacgacgacctccgacgacaccgtgtttcttttcgacgatttagatatcggttggtcccc

      A A G G C C G T K K S C *

accacagtagtgggcaagagtgatctgcatgttttttaacctgcttttccccatagcaca
34081 -----+-----+-----+-----+-----+-----+ 34140
tggtgtcatcaccgttctcactagacgtacaaaaaattggacgaaaaggggtatcggtg

gaccataagaaacaacaaatggggccgggcacagtggctcatgcctataatcccagcact
34141 -----+-----+-----+-----+-----+-----+ 34200
ctgggtattctttgtttgtttaccccgcccggtgtcaccgagtagcgatattaggggtcgtga

```

Exon 11

Figure 1 – page 46

```

ttgggagggccgaggcaggcagatcacctgaggtcaggagtttgataccagcctggccaac
34201 -----+-----+-----+-----+-----+-----+ 34260
aaccctccgggtccgtccgtctagtggactccagtcctcaaactatggtcggaccggttg

atgggtgaaatcctgtctctacaaaaatacaaaaaaattagctgggcatgggtggtgcac
34261 -----+-----+-----+-----+-----+-----+ 34320
taccacttttaggacagagatgggtttttatgttttttttaatcgaccgtaccaccacgtg

acctatagtctcagctactcgggagggtgaggcaggagaattgcttgaaccaggaagta
34321 -----+-----+-----+-----+-----+-----+ 34380
tggatatcagagtcgatgagccctccgactccgtcctttaacgaacttgggtccttcat

gaggctgcagtgagtaagcatcacgccactgtactccagcctgggcaacagagcaagact
34381 -----+-----+-----+-----+-----+-----+ 34440
ctccgacgtcactcattcgtagtgcggtgacatgaggtcggaccggtgtctcgttctga

ctgtctcaaagcaaaaaaaaaaaaaaaaaaagaaagaaagaaaaagaaaacaacaaatg (SEQ ID NO:1)
34441 -----+-----+-----+-----+-----+-----+ 34500
gacagagttttcggtttttttttttttttttttctttctttctttttggtgttttac (SEQ ID NO:2)

```

Figure 2A – page 1

```

GAGACAGTGAGTGCGCGCCCTGAGTCGCAGGCCGAGGAGACAGTGAGTGCGCGCCCTGAG
1  -----+-----+-----+-----+-----+-----+ 60
CTCTGTCACTCACGCGCGGACTCAGCGTCCGGCTCCTCTGTCACTCACGCGCGGACTC

TCGCAGGCCGAGGAGACATGGCTGCACTTCGTGACGCTGAGATACAGAAGGACGTGCAGA
61  -----+-----+-----+-----+-----+-----+ 120
AGCGTCCGGCTCCTCTGTACCGACGTGAAGCACTGCGACTCTATGTCTTCCTGCACGTCT

      M A A L R D A E I Q K D V Q T -

CCTACTACGGGCAGGTGCTGAAGAGATCGGCAGACCTCCAGACCAACGGCTGTGTACCA
121 -----+-----+-----+-----+-----+-----+ 180
GGATGATGCCCGTCCACGACTTCTCTAGCCGTCTGGAGGTCTGGTTGCCGACACAGTGGT

      Y Y G Q V L K R S A D L Q T N G C V T T -

CAGCCAGGCCGGTCCCCAAGCACATCCGGAAGCCTTGCAAAATGTACACGAAGAAGTAG
181 -----+-----+-----+-----+-----+-----+ 240
GTCGGTCCGGCCAGGGGTTTCGTGTAGGCCCTTCGGAACGTTTTACATGTGCTTCTTCATC

      A R P V P K H I R E A L Q N V H E E V A -

CCCTAAGATATTATGGCTGTGGTCTGGTGATCCCTGAGCATCTAGAAAAGTCTGGATTT
241 -----+-----+-----+-----+-----+-----+ 300
GGGATTCTATAATACCGACACCAGACCACTAGGGACTCGTAGATCTTTTGACGACCTAAA

      L R Y Y G C G L V I P E H L E N C W I L -

TGGATCTGGGTAGTGGAAGTGGCAGAGATTGCTATGTACTTAGCCAGCTGGTTGGTGAAA
301 -----+-----+-----+-----+-----+-----+ 360
ACCTAGACCCATCACCTTCACCGTCTCTAACGATACATGAATCGGTCGACCAACCACTTT

      D L G S G S G R D C Y V L S Q L V G E K -

AAGGACACGTGACTGGAATAGACATGACCAAAGGCCAGGTGGAAGTGGCTGAAAAGTATC
361 -----+-----+-----+-----+-----+-----+ 420
TTCCTGTGCACTGACCTTATCTGTACTGGTTTCCGGTCCACCTTCACCGACTTTTCATAG

      G H V T G I D M T K G Q V E V A E K Y L -

TTGACTATCACATGGAAAAATATGGCTTCCAGGCATCTAATGTGACTTTTTTCCATGGCA
421 -----+-----+-----+-----+-----+-----+ 480
AACTGATAGTGTAACCTTTTTATACCGAAGGTCCGTAGATTAACTGAAAAAAGGTACCGT

      D Y H M E K Y G F Q A S N V T F F H G N -

ACATTGAGAAGTTGGCAGAGGCTGGAATCAAGAATGAGAGCCATGATATTGTTGTATCAA
481 -----+-----+-----+-----+-----+-----+ 540
TGTAACCTTTCAACCGTCTCCGACCTTAGTTCTTACTCTCGGTACTATAACAACATAGTT

      I E K L A E A G I K N E S H D I V V S N -

```

Figure 2A – page 2

ACTGTGTTATTAACCTTGTGCCTGATAAACAACAAGTGCTTCAGGAGGCATATCGGGTGCG  
541 -----+-----+-----+-----+-----+-----+ 600  
TGACACAATAATTGGAACACGGACTATTTGTTGTTTCACGAAGTCCTCCGTATAGCCCACG  
C V I N L V P D K Q Q V L Q E A Y (R) V L -  
TGAAGCATGGTGGGGAGTTATATTTTCAGTGACGTCTATACGAGCCTTGAAGTGCAGAAAG  
601 -----+-----+-----+-----+-----+-----+ 660  
ACTTCGTACCACCCCTCAATATAAAGTCACTGCAGATATGCTCGGAAGTTGACGGTCTTC  
K H G G E L Y F S D V Y T S L E L P E E -  
AAATCAGGACACACAAAGTTTTATGGGGTGAGTGTCTGGGTGGTGCTTTATACTGGAAGG  
661 -----+-----+-----+-----+-----+-----+ 720  
TTTAGTCCTGTGTGTTTCAAATACCCCACTCACAGACCCACCACGAAATATGACCTTCC  
I R T H K V L W G E C L G G A L Y W K E -  
AACTTGCTGTCCTTGCTCAAAAAATTGGGTTCTGCCCTCCACGTTTGGTCACTGCCAATC  
721 -----+-----+-----+-----+-----+-----+ 780  
TTGAACGACAGGAACGAGTTTTTTAAACCAAGACGGGAGGTGCAAACAGTGACGGTTAG  
L A V L A Q K I G F C P P R L V T A N L -  
TCATTACAATTCAAAACAAGGAAGTGGAAAGAGTTATCGGTGACTGTCGTTTTGTTTCTG  
781 -----+-----+-----+-----+-----+-----+ 840  
AGTAATGTTAAGTTTTGTTTCCTTGACCTTTCTCAATAGCCACTGACAGCAAAACAAAGAC  
I T I Q N K E L E R V I G D C R F V S A -  
CAACATTTTCGCTCTTCAAACACTCTAAGACAGGACCAACCAAGAGATGCCAAGTTATTT  
841 -----+-----+-----+-----+-----+-----+ 900  
GTTGTAAAGCGGAGAAGTTTGTGAGATTCTGTCTGTTGGTTCTCTACGGTTCAATAAA  
T F R L F K H S K T G P T K R C Q V I Y -  
ACAATGGAGGAATTACAGGACATGAAAAAGAACTAATGTTTGATGCCAATTTTACATTTA  
901 -----+-----+-----+-----+-----+-----+ 960  
TGTTACCTCCTTAATGTCCTGTACTTTTTCTTGATTACAACTACGGTTAAATGTAAAT  
N G G I T G H E K E L (M) F D A N F T F K -  
AGGAAGGTGAAATTGTTGAAGTGGATGAAGAAACAGCAGCTATCTTGAAGAATTCAAGAT  
961 -----+-----+-----+-----+-----+-----+ 1020  
TCCTTCCACTTTAACAACCTTCACCTACTTCTTTGTCGTCGATAGAACTTCTTAAGTTCTA  
E G E I V E V D E E (T) A A I L K N S R F -  
TTGCTCAAGATTTTCTGATCAGACCAATTGGAGAGAAGTTGCCAACATCTGGAGCTGTTC  
1021 -----+-----+-----+-----+-----+-----+ 1080  
AACGAGTTCTAAAAGACTAGTCTGGTTAACCTCTCTTCAACGGTTGTAGACCTCGACAAG  
A Q D F L I R P I G E K L P T S G G C S -



**Figure 2A – page 3**

```
TGCTTTGGAGTTAAAGGATATAATCACAGATCCATTTAAGCTTGCAGAAGAGGTCTGACA
1081 -----+-----+-----+-----+-----+-----+ 1140
ACGAAACCTCAATTTCTATATTAGTGTCTAGGTAAATTGGAACGTCTTCTCCAGACTGT

  A L E L K D I I T D P F K L A E E S D S -

GTATGAAGTCCAGATGTGTCCCTGATGCTGCTGGAGGCTGCTGTGGCACAAGAAAAGCT
1141 -----+-----+-----+-----+-----+-----+ 1200
CATACTTCAGGTCTACACAGGGACTACGACGACCTCCGACGACACCGTGTTTCTTTTCGA

  M K S R C V P D A A G G C C G T K K S C -

GCTAAATCTATAGCCAACCAGGGGACCACAGTAGTGGGCAAGAGTGATCTGCATGTTTTTT
1201 -----+-----+-----+-----+-----+-----+ 1260
CGATTTAGATATCGGTTGGTCCCCTGGTGTCTATCACCCTTCTACTAGACGTACAAAAAA

*

TAACCTGCTTTTTCCCATAGCACAGACCATAAGAAACAACAAATGAGCCACTGCGCCCGG
1261 -----+-----+-----+-----+-----+-----+ 1320
ATTGGACGAAAAGGGGTATCGTGTCTGGTATTCTTTGTTGTTTACTCGGTGACGCGGGCC

CCATAAATGAATTATTTTTAAGAGGCATTGATTAAAGATTCACAGCAAATCACTAGTTAA
1321 -----+-----+-----+-----+-----+-----+ 1380
GGTATTTACTTAATAAAAATTCTCCGTAATAATTCTAAGTGTCGTTTAGTGATCAATT

GCAGATTTTTTTTCTATTTCTACTTCAAAGTTCTGGTGCCACATAGTGGTCAGAAATGG
1381 -----+-----+-----+-----+-----+-----+ 1440
CGTCTAAAAAAAAGATAAAGGATGAAGTTTCAAGACCACGGTGTATCACCAGTCTTTACC

AACAGAGAAGCTGTCTTAAGCCTTGTTCAAGAAGCAGGAAAGGCATCAGAAGAAGTAACA
1441 -----+-----+-----+-----+-----+-----+ 1500
TTGTCTCTTCGACAGAATTCCGAACAAGTTCTTCGTCTTTCCGTAGTCTTCTTCATTGT

GTTGGCAGAGGGTCTCAGGAAAAACATCTTCCTTCTGATCTTTTGCATAGCACCTTTTGG
1501 -----+-----+-----+-----+-----+-----+ 1560
CAACCGTCTCCCAGAGTCCTTTTTGTAGAAGGAAGACTAGAAAACGTATCGTGGAAGAAC

AATTTTCATCATGTTTGCTTATTAAACAAAGCTCCTACTGCCATCATACTAATCATGCAA
1561 -----+-----+-----+-----+-----+-----+ 1620
TTAAAAGTAGTACAAACGAATAATTTGTTTCGAGGATGACGGTAGTATGATTAGTACGTT

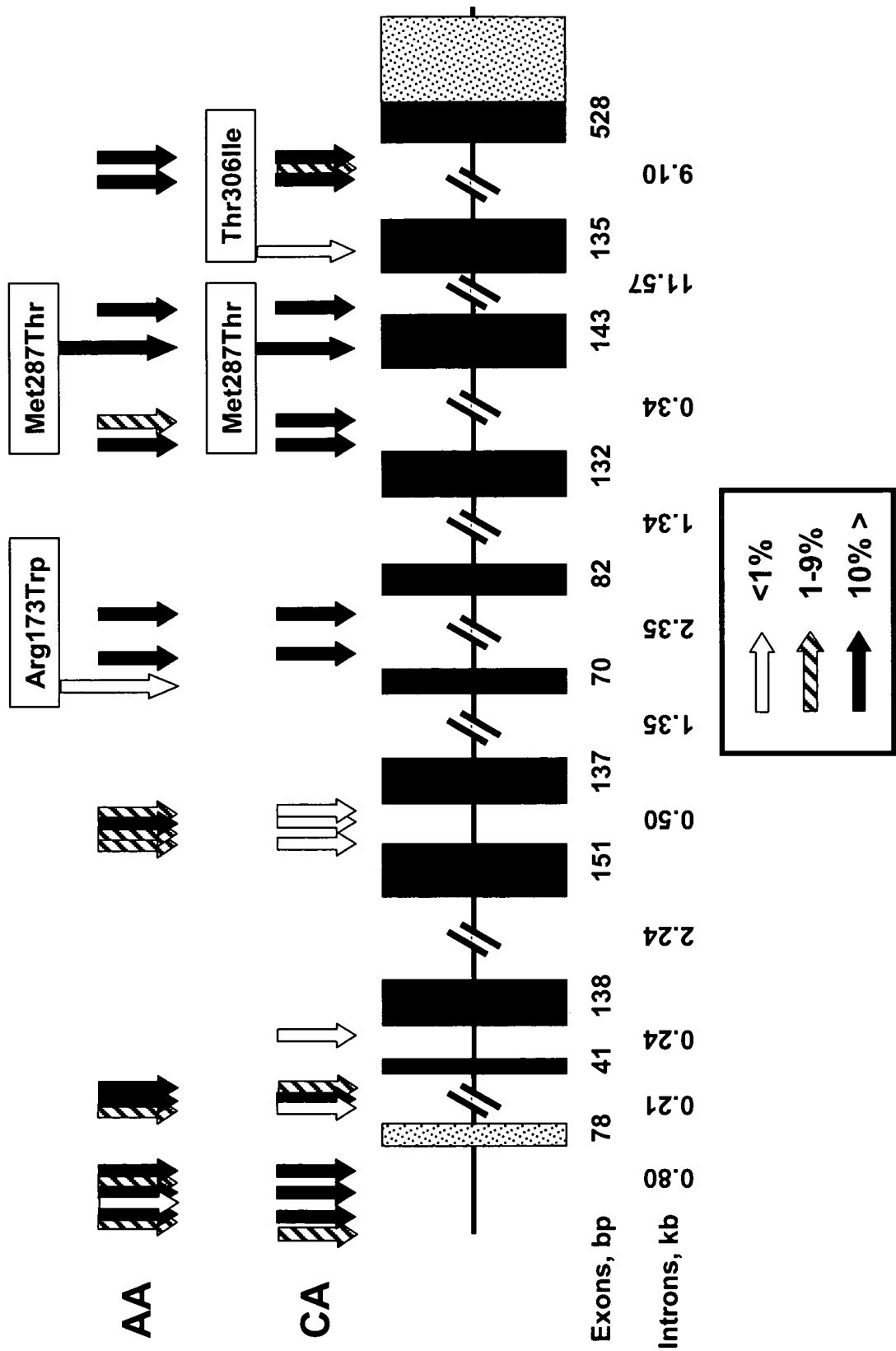
AAAGATTGCCAAATCATGTTTGGTAGGAGGACTTTTGAGGTAGCTTTTGAACAAATGTTT
1621 -----+-----+-----+-----+-----+-----+ 1680
TTTCTAACGGTTTAGTACAAACCATCCTCCTGAAACTCCATCGAAACTTGTTTACAAA

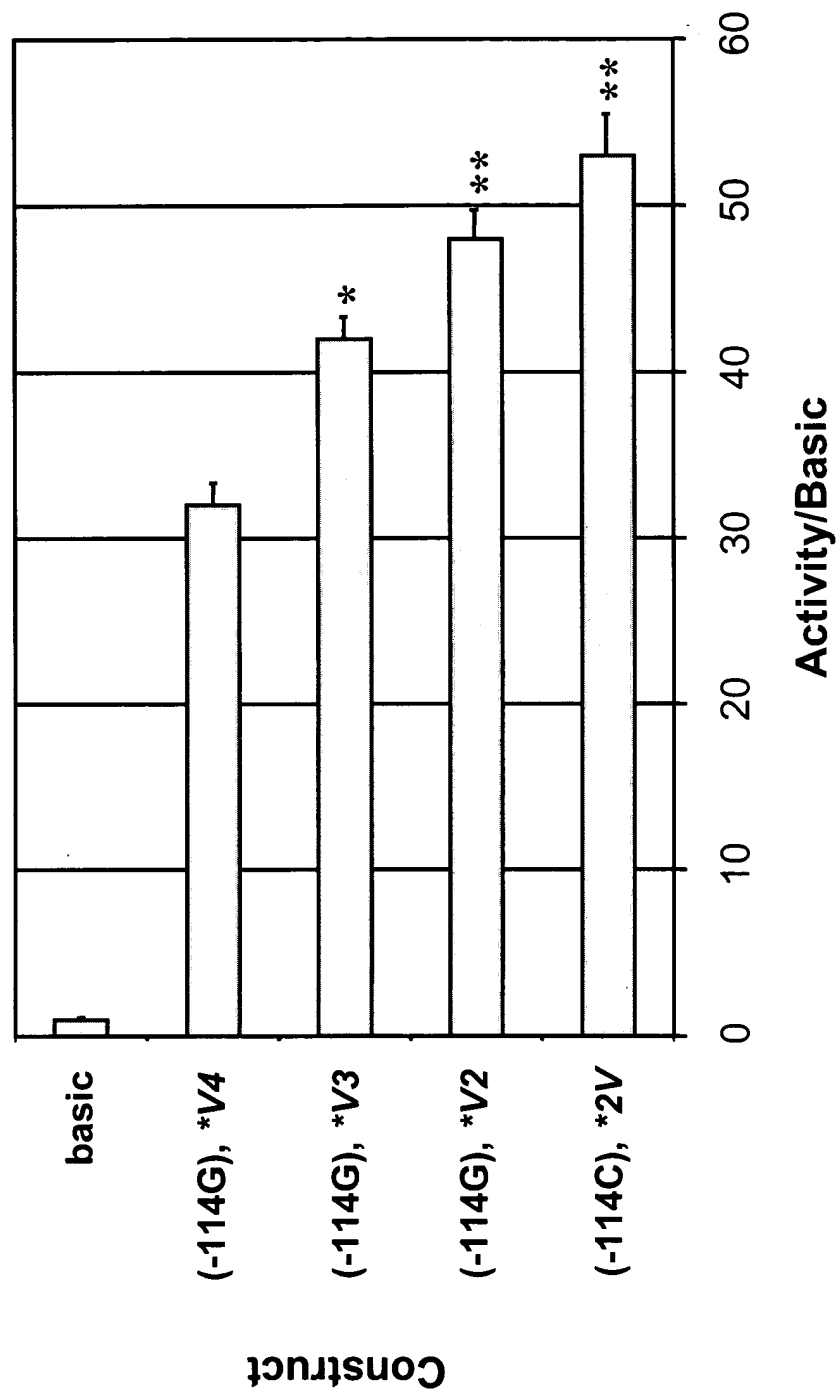
TTTTCTTTTTTCTTTTTTTTTTGCAATAAAGAAAACAAATTAATCATAAAAAAAA (SEQ ID NO:3)
1681 -----+-----+-----+-----+-----+-----+ 1735
AAAAGAAAAAAGAAAAAAAACGTTATTTCTTTTGTTTAATTAGTATTTTTTTTTT (SEQ ID NO:4)
```

**Figure 2B**

MAALRDAEIQKDVQTYYGQVLKRSADLQTNGCVTTARPVPKHIREALQNVHEEVALRY  
YGCGLVIPEHLENCWILDLGSGSGRDCYVLSQLVGEKGHVTGIDMTKGQVEVAEKYLD  
YHMEKYGFQASNVTFIHGYIEKLGEAGIKNESHDIVVSNCVINLVDPKQQVLQEAYRVL  
KHGGELYFSDVYTSLELPEEIRTHKVLWGECLGGALYWKELAVLAQKIGFCPPRLVTAN  
LITIQNKELERVIGDCRFVSATFRLFKHSGTGPTKRCQVIYNGGITGHEKELMFDANFTFK  
EGEIVEVDEETAAILKNSRFAQDFLIRPIGEKLPTSGGCSALELKDIITDPFKLAEESDSMK  
SRCVPDAAGGCCGTTKSC (SEQ ID NO:5)

Figure 3



**Figure 4A**

**Figure 4B**